UNITED STATES DEPARTMENT OF AGRICULTURE
MISCELLANEOUS PUBLICATION No. 265

WASHINGTON, D. C. ISSUED November 1937

A GRAPHIC SUMMARY OF FARM LABOR AND POPULATION

(BASED LARGELY ON THE CENSUS OF 1930 AND 1935)

By

J. C. FOLSOM
Associate Agricultural Economist

and

O. E. BAKER
Senior Agricultural Economist
Bureau of Agricultural Economics

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1937

For sale by the Superintendent of Documents, Washington, D. C. - - - - - - - - - - Price 10 cents

This publication is one of a projected series of 10 publications as follows:

A Graphic Summary of Physical Features and Land Utilization in the United States ---------- O. E. Baker
A Graphic Summary of Farm Tenure ---------- H. A. Turner
A Graphic Summary of Farm Taxation ---------- Donald Jackson
A Graphic Summary of the Value of Farm Property
B. R. Stauber and M. M. Regan
A Graphic Summary of Farm Machinery, Facilities, Roads, and Expenditures ---------- O. E. Baker
A Graphic Summary of Farm Labor and Population
J. C. Folsom and O. E. Baker
A Graphic Summary of the Number, Size, and Type of Farm, and Value of Products ---------- O. E. Baker
A Graphic Summary of Farm Crops -- O. E. Baker and A. B. Genung
A Graphic Summary of Farm Animals and Animal Products
O. E. Baker
A Graphic Summary of Farm Mortgage Debt
D. L. Wickens and N. J. Wall

This series, which has been prepared under the general direction of O. E. Baker, senior agricultural economist, will bring up to date the Graphic Summary of American Agriculture published in 1931 as Miscellaneous Publication 105.

The first Graphic Summary of American Agriculture appeared in the 1915 Yearbook of Agriculture (also issued as Yearbook Separate 681), and was largely based on the 1910 census. The second was contained in the 1921 Yearbook (also issued as Yearbook Separate 878), and was based largely on the 1920 census. The third was published as Miscellaneous Publication No. 105, in May 1931, and was based on both the 1925 Agricultural Census and the annual estimates of the Bureau of Agricultural Economics. It was divided into 11 sections, but these sections were bound together and issued only as a single publication. It was more inclusive than previous issues, particularly of maps and graphs relating to the economic and social aspects of agriculture.

The publications in this series devote still more attention to economic and social conditions. They are based on both the 1930 and 1935 census reports, as well as the annual estimates of the Bureau of Agricultural Economics. They deal not only with changes between 1930 and 1935, but also with the changes during the decade of urban prosperity and agricultural depression that preceded the more general depression. Most of the distribution maps for crops and many of those for livestock present the 1929 census returns, because the drought of unprecedented severity and extent in 1934 would make such maps for 1934 misleading. Several increase and decrease maps, however, show the changes that occurred between 1929 and 1934, or 1930 and 1935.

The graphic presentation was designed and drafted under the direction of R. G. Hainsworth, in charge of the graphic section of the Bureau of Agricultural Economics.

Most of the clerical work was done under the supervision of N. P. Bradshaw, who also prepared the indexes.

UNITED STATES DEPARTMENT OF AGRICULTURE
MISCELLANEOUS PUBLICATION NO. 265
Washington, D. C. Issued November 1937

A GRAPHIC SUMMARY OF FARM LABOR AND POPULATION

(BASED LARGELY ON THE CENSUS OF 1930 AND 1935)

By J. C. Folsom, *associate agricultural economist*, and O. E. Baker, *senior agricultural economist, Bureau of Agricultural Economics*

FARM LABOR

Out of every 100 farm workers on April 1, 1930, approximately 58 were farm operators, 26 were wage workers, and 16 were unpaid family members. The total was 10,482,000. The 1935 Census of Agriculture taken as of January 1, reported the numbers of persons who had done 2 or more days of farm work during the first week of January. Farm operators made up 53 of every 100 farm workers; other family members, 34; and hired help, 13. The total was 12,408,000. Most persons thus occupied in midwinter may be considered all-year workers in the industry.

In spite of the differences in dates of census enumeration and questions asked in the censuses of 1930 and 1935, the information obtained shows decided changes in numbers of farm workers. The number of farms, and consequently of farm operators, had risen one-twelfth to 6,812,000. The number of farm family members working on farms without wages had risen to 4,273,000, which is two and one-half times as many as those recorded in 1930 as unpaid family workers. On the other hand, only three-fifths as many hired hands did 2 or more days of farm work during the first week of January 1935 as reported themselves as farm wage workers in 1930. This decline in number doubtless indicates seasonal differences in employment more than actual occupational changes.

The increase in number of farms and farm operators was due primarily to the economic depression and resultant unemployment. About 2,000,000 persons were reported living on farms January 1, 1935, who had not been living on farms 5 years before. Most of the 500,000 increase in number of farms took place around the cities, especially the large industrial cities, and in areas of poor soil or hilly surface, also of high birth rates, notably the southern Appalachian Mountains. Undoubtedly most of these new farms were small and were part time or self-sufficing in character, and their operators were not fully employed—at least not efficiently employed. Total agricultural production decreased notably during the depression, partly because of the drought in the West.

Agriculture is a highly seasonal industry. Winter operations in most States are reduced to their lowest point of the year. Spring operations of land fitting, planting, and crop cultivation bring in-

creased need for labor. In some areas and for some crops these demands require large additions to labor forces. Among these demands are cotton chopping, sugar-beet blocking and thinning, and lambing. Summer and fall usually bring greatest demand for labor as the crops mature. Thousands of short-time laborers are needed to harvest and thresh wheat, to gather truck and fruit crops promptly, to pick cotton, to snap and husk corn, and to pull and top sugar beets.

The average wages of farm laborers are small and for many the employment is transitory. Only two-fifths of the farms of the Nation reported an expenditure for labor in 1929. On those farms hired hands were employed an average of only 156 days in the year at a wage of $2.32 per day. This enabled the average worker to earn $360 by farm work in the year. These figures emphasize the fact that laborers who hired out only for farm work had employment only half of 1929 on the average, and earned far too little to meet the costs of any accepted American standard of living.

But since 1929 farm wages have been much lower. From 170 percent of the pre-war level of 1910–14 in 1929, they dropped over half to 72 percent in April 1933, but had risen by July 1937 to 123 percent. Opportunity for employment, as indicated by farmers' demands for labor compared to normal, fell off one-third, and has not yet fully recovered. This situation compelled many farm laborers to find other work during part of the year, or to ask for relief.

A large volume of woman and child labor is employed in agriculture because of the demand for cheap labor, and because of the economic need of many rural families for all possible production and earnings. Children formed 10.7 percent, and women 14.7 percent of all farm laborers, paid and unpaid, in 1930. Similarly, they made up 4.5 and 8.7 percent, respectively, of all persons engaged in agriculture. Seven-eighths of the children and five-sixths of the women were reported from the Southern States where farm incomes and wage rates are lowest. Doubtless the proportion of women who do farm work in the North is larger than reported; but as the work consists commonly of light chores rather than labor in the fields, and is incidental to housework, the census does not consider such women as gainfully employed in agriculture.

Farmer demand for the labor of children and women is strongest in sections producing truck crops, small fruits, cotton, and sugar beets. These crops furnish considerable work that is commonly considered within the strength and ability of women and children. Much of it requires stooping, and light dexterous hand work, such as weeding and picking crops.

Economic need drives the women and children of thousands of families to do farm work. In the Cotton Belt the low farm prices of cotton have for years forced croppers to work all able members of their families to raise as much cotton as they could pick. Similarly, laborers among the sugar beets of the Rocky Mountain and North Central States have pressed into work the women and children of their families.

Migratory families form an important part of the agricultural labor supply of the Southwestern and Pacific States. They have such irregular opportunities for work that whenever possible the women and children work to supplement the meager earnings of the heads of the families.

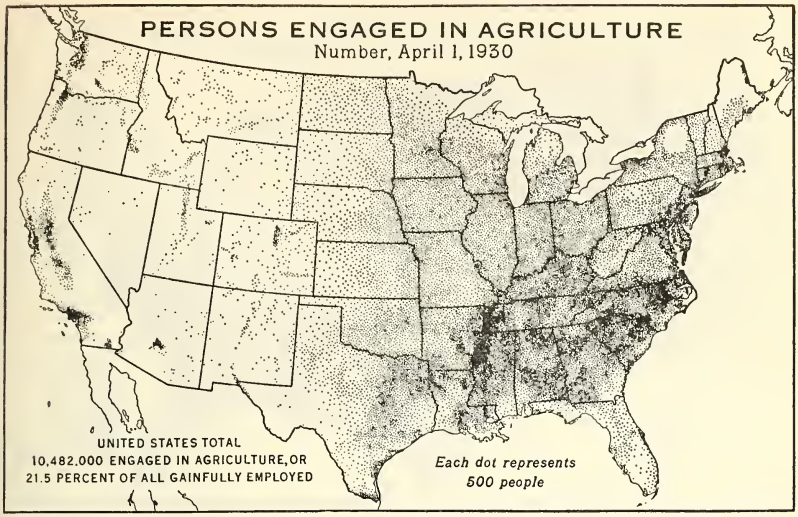


FIGURE 1.—Fifty-three percent of all persons engaged in agriculture in 1929 were in the South, and 38 percent in the North. Distribution of the agricultural population is relatively dense east of the Mississippi River and in the tier of States immediately west of it. Some of the bottom lands of the Mississippi contain the greatest numbers per square mile. West of the one hundredth meridian the agricultural population is irregularly thin. The population of the dry-land farming and the ranching sections is very scattered; but concentrations are found in the irrigated areas.

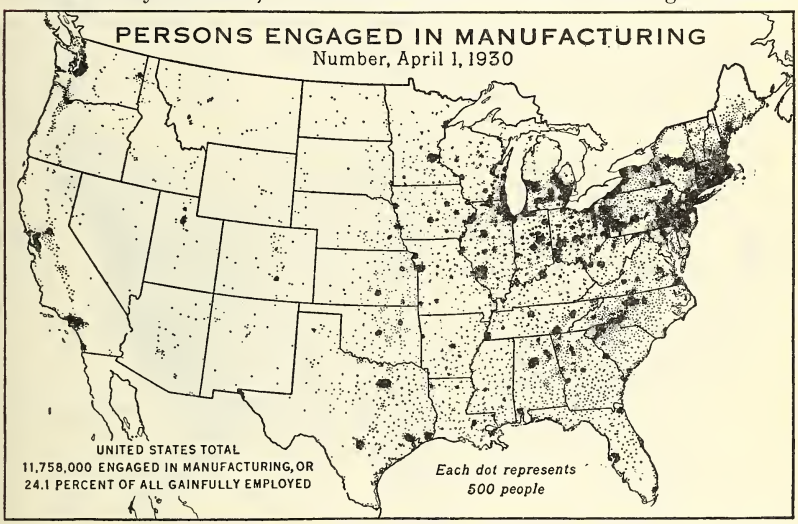
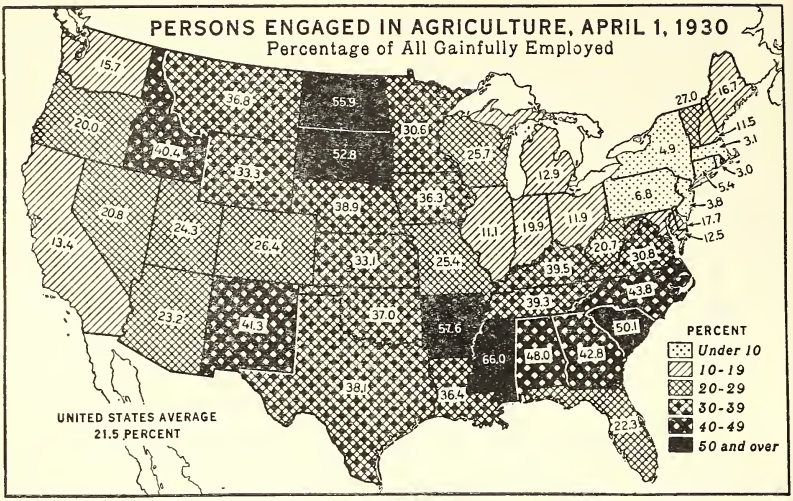
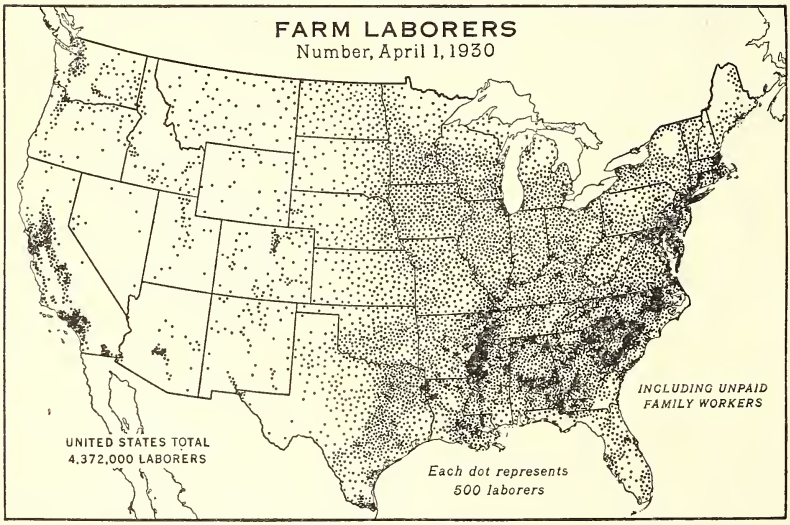


FIGURE 2.—Seventy-four percent of all the persons engaged in manufacturing in the Nation in 1929 were in the North, 19 percent in the South, and 7 percent in the West (11 far Western States). The great belts of manufacturing are (1) the North Atlantic, extending from Portland, Maine, to Baltimore, Md.; (2) the Great Lakes, extending from Rochester to Chicago and Milwaukee; (3) the Mississippi Valley centers, between and including Pittsburgh, Minneapolis, Omaha, and New Orleans; (4) the southern Piedmont, and (5) the Pacific coast cities of Los Angeles, the San Francisco district, Portland, Oreg., and The Puget Sound.



BAE 24024

FIGURE 3.—On April 1, 1930, 10,482,000 persons, or one-fifth of all persons gainfully occupied in the United States were engaged in agriculture; in 1920, one-fourth. In southern New England, New York, New Jersey, and Pennsylvania only 3 to 7 persons in 100 gainfully employed worked on farms in 1930; in most Southern States from 30 to 66 out of 100. Over half of the working population was engaged in agriculture in South Carolina, Arkansas, Mississippi, and the Dakotas. Of all agricultural workers in the United States 2 in 5 were laborers and 3 in 5 were farm operators.



BAE 31467

FIGURE 4.—Laborers (2,727,000 wage hands and 1,645,000 unpaid family workers) formed 41.7 percent of all persons engaged in agriculture on April 1, 1930. In April most hired laborers are year and season hands. More than half the laborers were in the Cotton Belt and in the tobacco-, fruit-, and truck-growing districts, because of large hand-labor requirements. Few hired laborers are now required in wheat harvesting, and the corn harvester has reduced the number needed in the Corn Belt. In the Cotton Belt a large proportion of the labor is unpaid family labor.

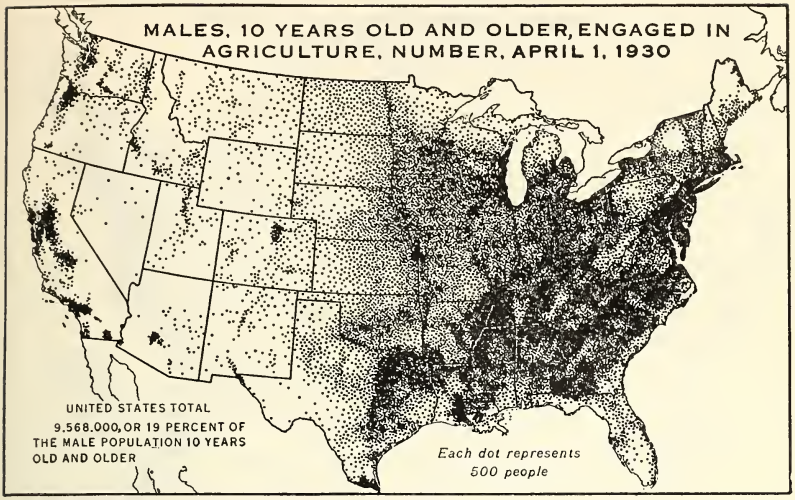


FIGURE 5.—Agriculture in the United States is largely a masculine occupation because of the nature of the work. Males made up nine-tenths (91.3 percent) of those reported as engaged in the agriculture of the country on April 1, 1930. Owing to climatic limitations on agriculture, six out of seven of the males engaged in agriculture worked in the eastern half of the United States. Half of the country's male farm workers were found in the Southern States. Lack of adapted machinery results in much hand labor in the South.

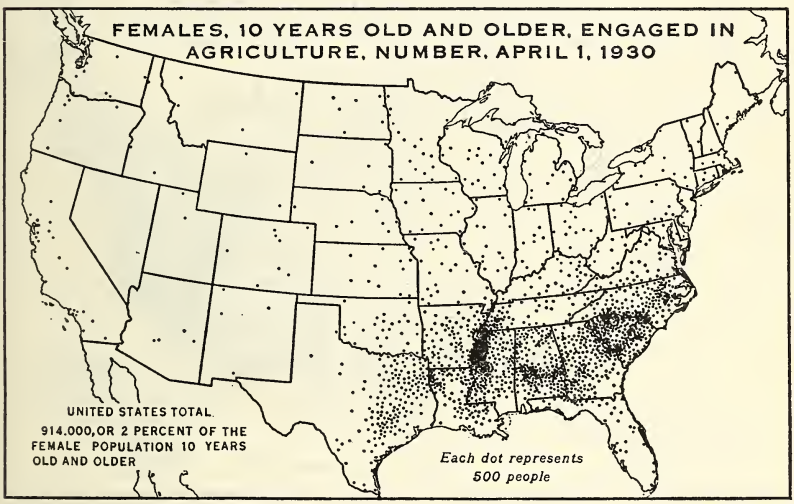


FIGURE 6.—Women constituted one-twelfth of all persons engaged in agriculture on April 1, 1930. Half were unpaid family workers, nearly 1 in 5 were wage workers, and 2 in 7 were farm operators. Three-fourths of all women engaged in agriculture were reported from the Cotton Belt. Elsewhere the numbers were small. In States of the South, east of the Mississippi River, as many as two-thirds of the women engaged in agriculture were Negroes; west of the river, slightly over half.

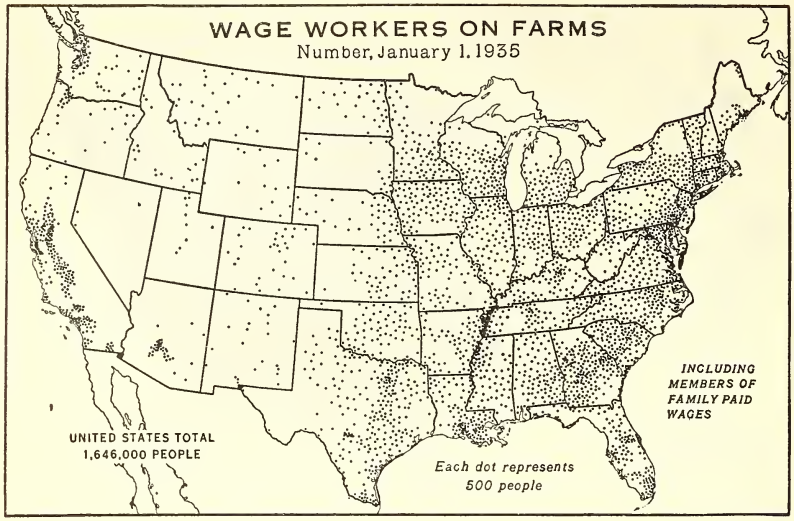


FIGURE 7.—The numbers of wage workers on farms are at about the lowest in the year in January in most parts of the United States, because winter conditions have forced the slackening of activities. On January 1, 1935, wage workers comprised over one-eighth of all persons engaged in agriculture. The majority of wage workers on farms at this time of the year are year hands. Nearly one-fourth of the farmers in the North Atlantic States and Pacific States were then hiring labor, but only 1 in 12 in the South Central States.

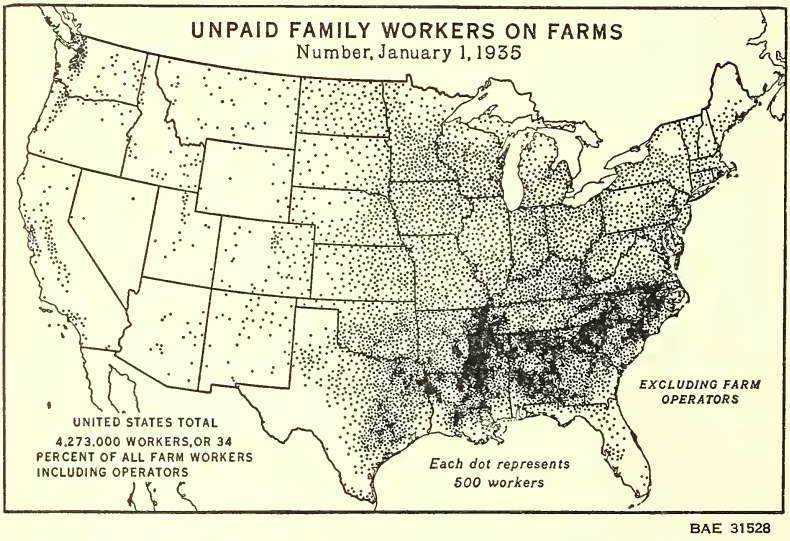


FIGURE 8.—Members of farm operators' families working without wages formed one-third of all persons working on farms on January 1, 1935, a much larger proportion than was reported in 1930. There was an average of five such workers for every eight farms. Next to farm operators, they form the largest group of farm workers. The number of farms using unpaid family workers increases somewhat during the summer, while the number of such workers increases even more proportionately. These changes are caused by the employment of children during school vacations.

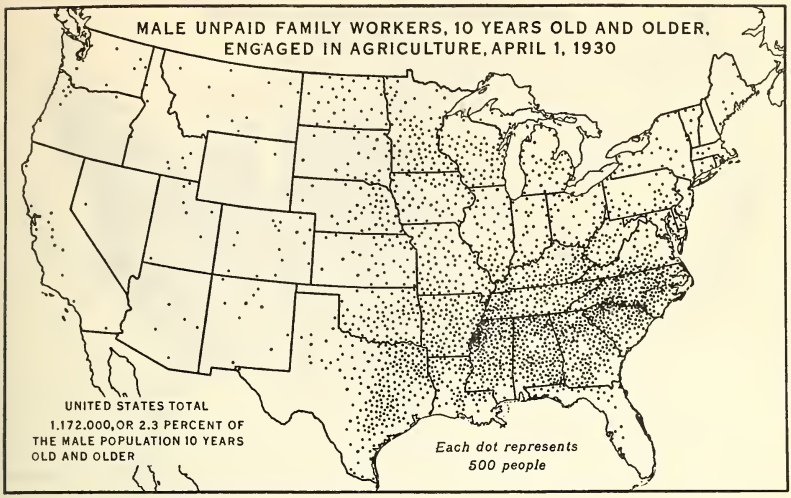


FIGURE 9.—Male unpaid family workers formed one-ninth of all persons engaged in agriculture on April 1, 1930, and one-fourth of all farm laborers. They were largely farmers' sons working at home. These young workers constituted nearly one-sixth of all agricultural workers in the Southeastern States, because of the small amount of labor hired by croppers. By contrast, they formed only 2 to 3 percent of all agricultural workers in the Pacific States. In that region hired laborers form a larger part of the agricultural workers than in any other.

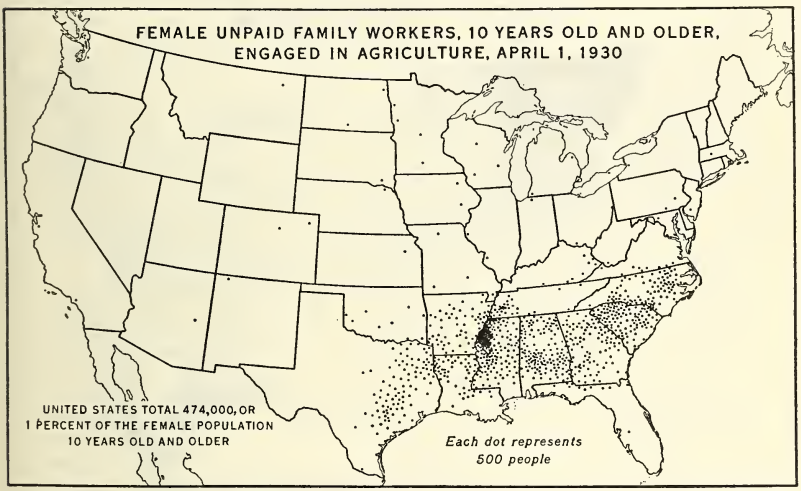


FIGURE 10.—Female unpaid family workers make up a comparatively small proportion of all agricultural workers—only 4.5 percent as reported by the census on April 1, 1930. This group apparently is important as a factor in the agricultural labor supply only in the Cotton Belt, where the croppers' and share tenants' wives and daughters do a large part of the field work. More than two million farm women in the North and West help take care of the poultry, cows, and gardens, but are not reported as engaged in agriculture.

153759°—37——2

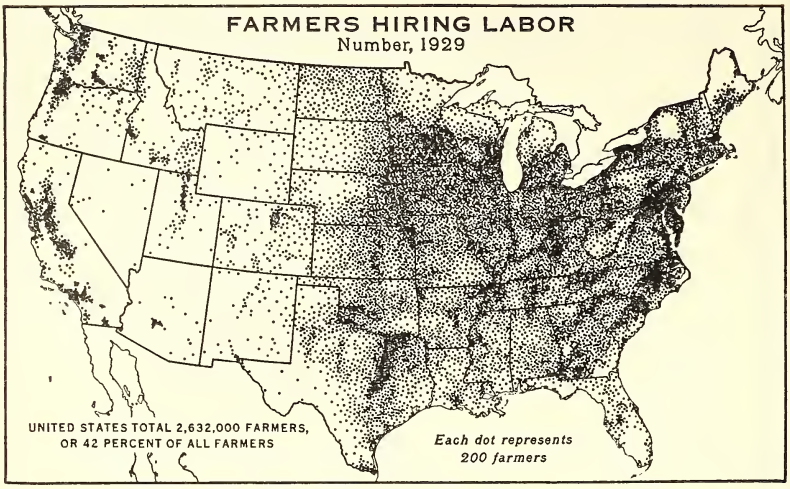


FIGURE 11.—The number of farmers hiring labor is greatest in districts of intensive and specialized crop culture, particularly truck and fruit crops, and in the dairy areas. Seasonal variations in labor employed are least among general and livestock farmers who have relatively steady needs. The comparatively small number of farmers who hire labor in the central Cotton Belt is accounted for by the fact that croppers and share tenants provide most of the labor. Although classed by the census as farm operators, croppers are practically farm laborers paid by a share of the crops rather than money wages.

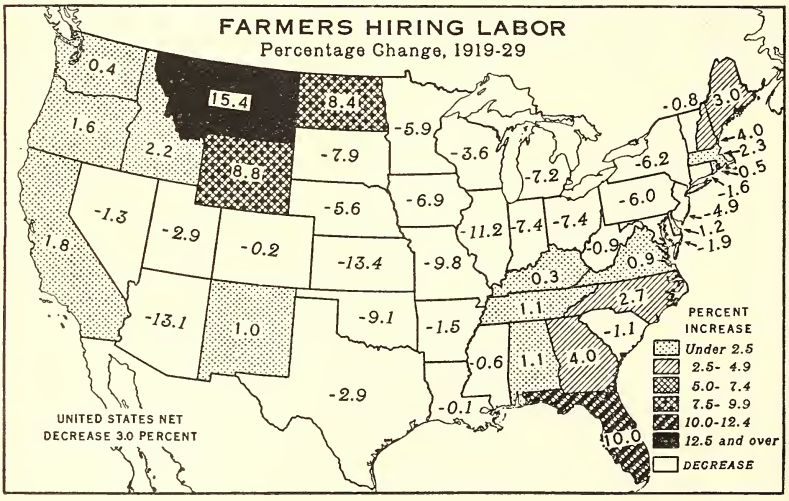


FIGURE 12.—Between 1919 and 1929 the decline in proportion of the farmers who hired labor extended from Vermont and Connecticut to Minnesota, South Dakota, Nevada, and Texas. In this vast region grain farming particularly was becoming increasingly mechanized. In most of those States east of the Mississippi, nonagricultural competition for labor forced farmers to reduce labor expense. The largest increases in proportions of farmers hiring labor occurred in Montana, North Dakota, and Wyoming, largely caused by notable increases in number of farms growing wheat; and in Florida, where the truck and fruit acreage was expanding.

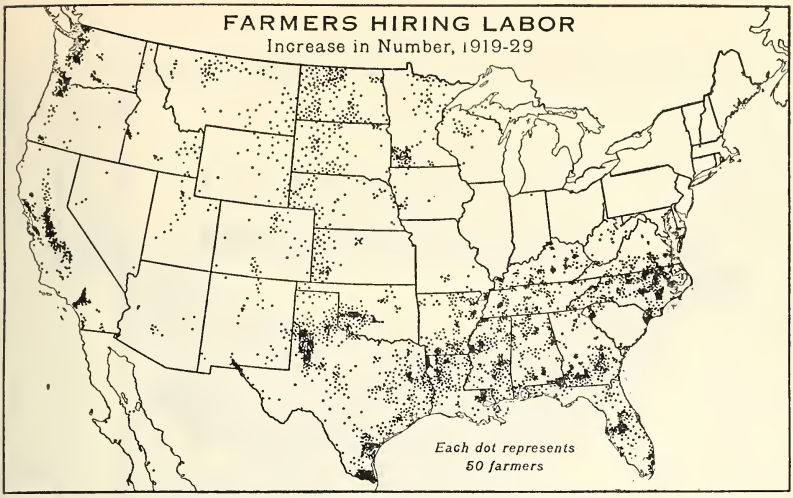


FIGURE 13.—In certain Southern, Great Plains, and Pacific States the number of farmers hiring farm labor in 1929 was greater than in 1919. Nearly half of the increase occurred in North Carolina, Texas, and California. Each of these States reported between 10,000 and 15,000 more farmers hiring labor than 10 years earlier. The increase in number of farms hiring labor was partially associated with changes in acreage of harvested crops, particularly cotton, tobacco, fruit, truck, and other crops not extensively handled by machinery.

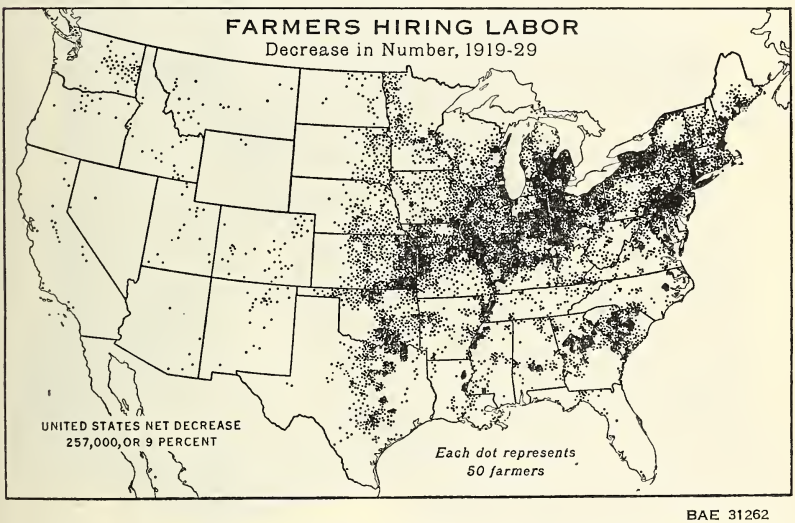


FIGURE 14.—Over one-fourth of a million fewer farmers in the United States hired farm labor in 1929 than in 1919. Almost all of this decrease occurred in the Northern States east of the Great Plains. Decreases also occurred in Oklahoma and central Texas, South Carolina, and central Georgia. These declines were generally associated with decreases in numbers of farms, in land in farms, and in land in harvested crops. Many farmers hire only at harvest time; consequently changes in acreage of crops harvested decidedly affect amount of labor hired. Increased use of machinery also diminished the need for labor.

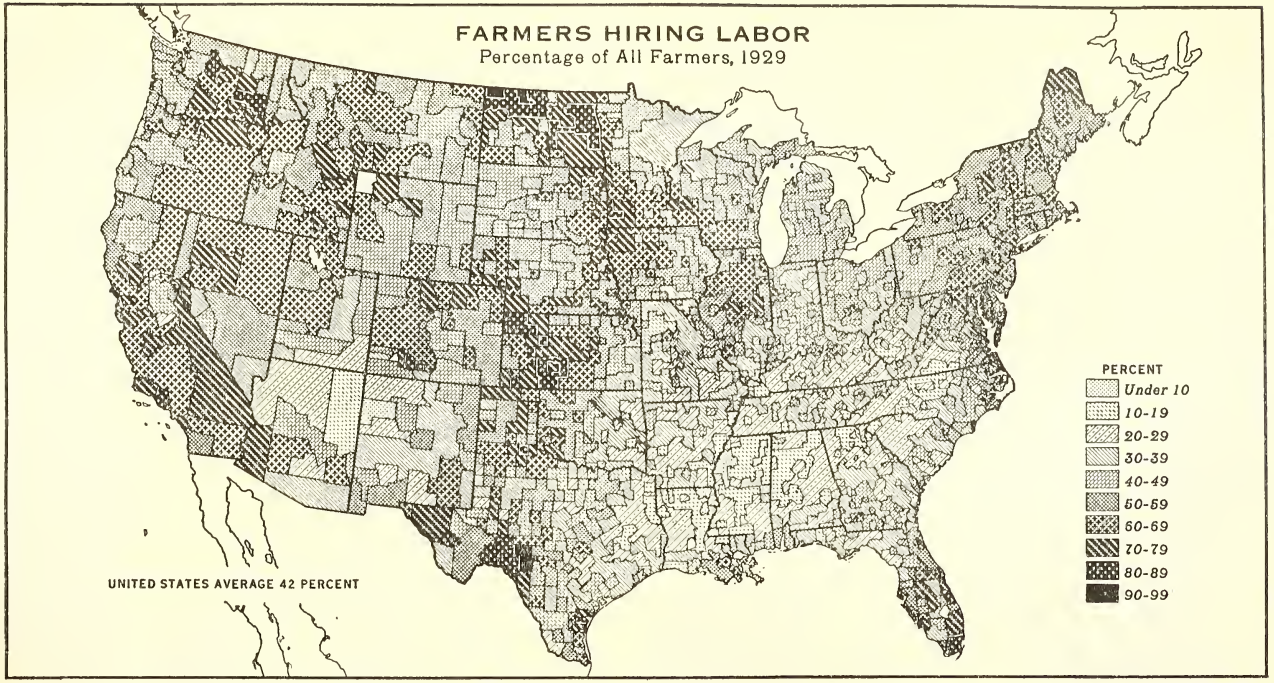


FIGURE 15.—Two out of five farmers hired labor at some time in 1929. By geographic divisions the percentage ranged from 23.5 in the East South Central to 62.3 in the Pacific States. Influences affecting the proportion include size of farm, type of farming, and tenure of operator. Large farms and intensively worked farms necessarily hire labor. On many specialized farms the farm family alone can do nearly all the work except harvesting. Regions in which high percentages of farmers hire labor include truck- and fruit-crop sections, wheat-producing areas, corn and hog sections, certain dairy-farming areas, and many western livestock areas. In the Cotton Belt the prevalence of the cropper system reduces the proportion of farmers who hire labor.

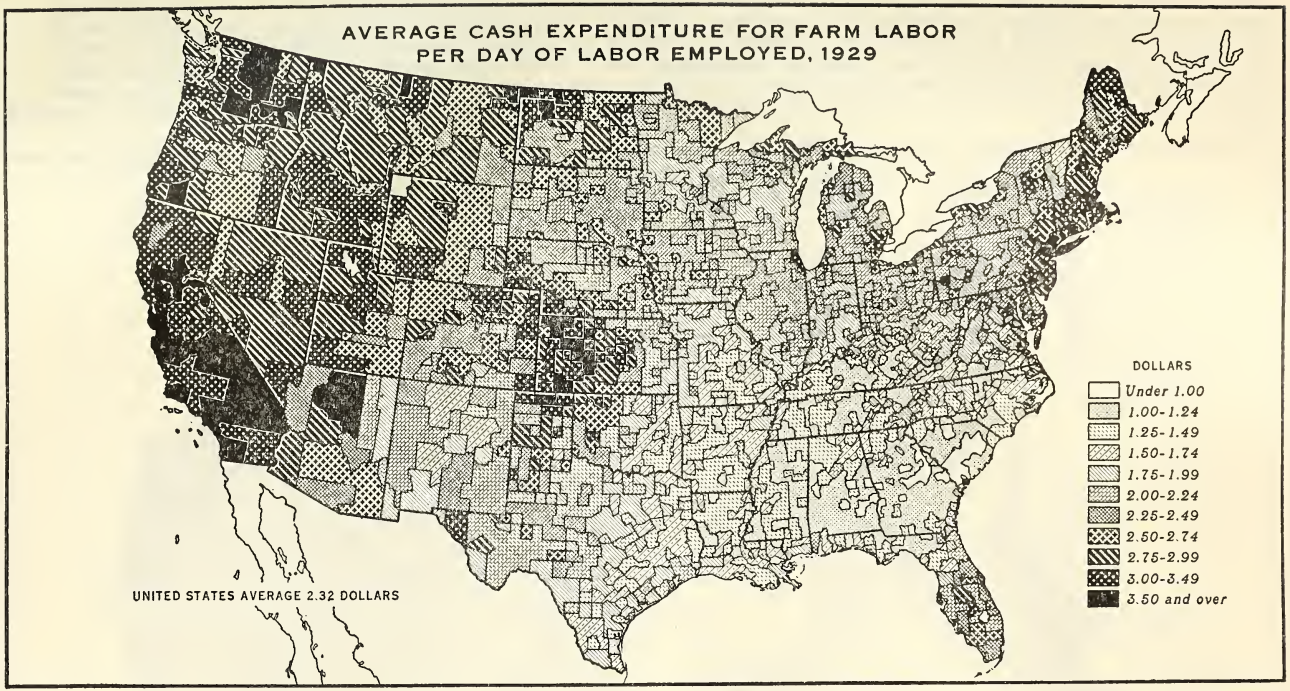


FIGURE 16.—In 1929, American farmers spent an average of $2.32 in money for wages of hired farm laborers per day of labor employed. The average varied from $1.04 in South Carolina to $3.55 in California. Many farmers provided board and lodging in addition. Factors influencing cost of agricultural labor per day include farmers' demand for labor, productivity of labor, volume and character of labor supply, distance to sources of supply, competition of other industries for labor, type of tenure of farm operators, kind of work to be done, duration of employment, and usual prices of farm products. The South is predominantly a low-wage region, and the Northeast and the West, except New Mexico, relatively high-wage regions.

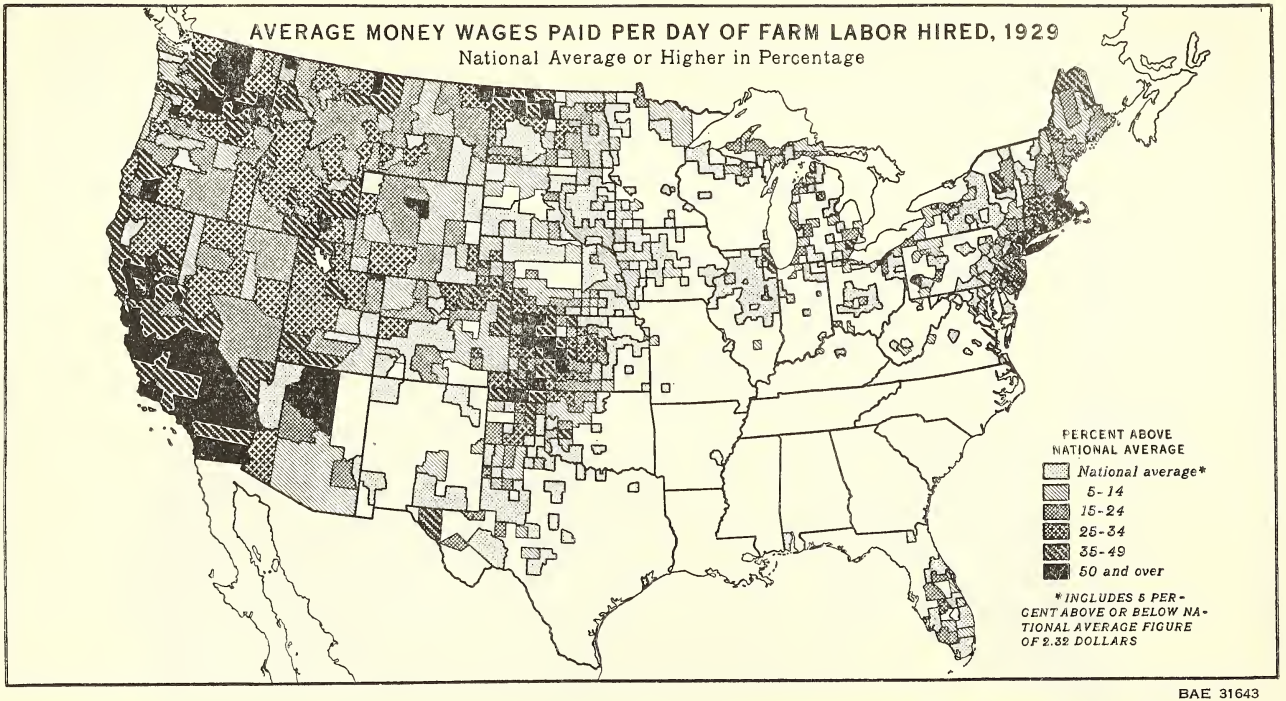


FIGURE 17.—Wages above the national average for farm labor characterize the farming areas near large cities and industrial areas of the Northeastern States. Wages are relatively high also in the wheat areas of the Great Plains (particularly those distant from sources of harvest labor supply), the ranching and irrigated crop areas of the Western States, the intensive fruit- and vegetable-growing districts of central Washington, of California, of Florida, and of the North Atlantic coast from New Jersey to Massachusetts. In most of the Corn Belt, wages were near the national average. The highest State average was that of California, $3.55. The map suggests that the principal factors associated with high wages for farm labor are the use of machinery and the competition of urban industries for labor.

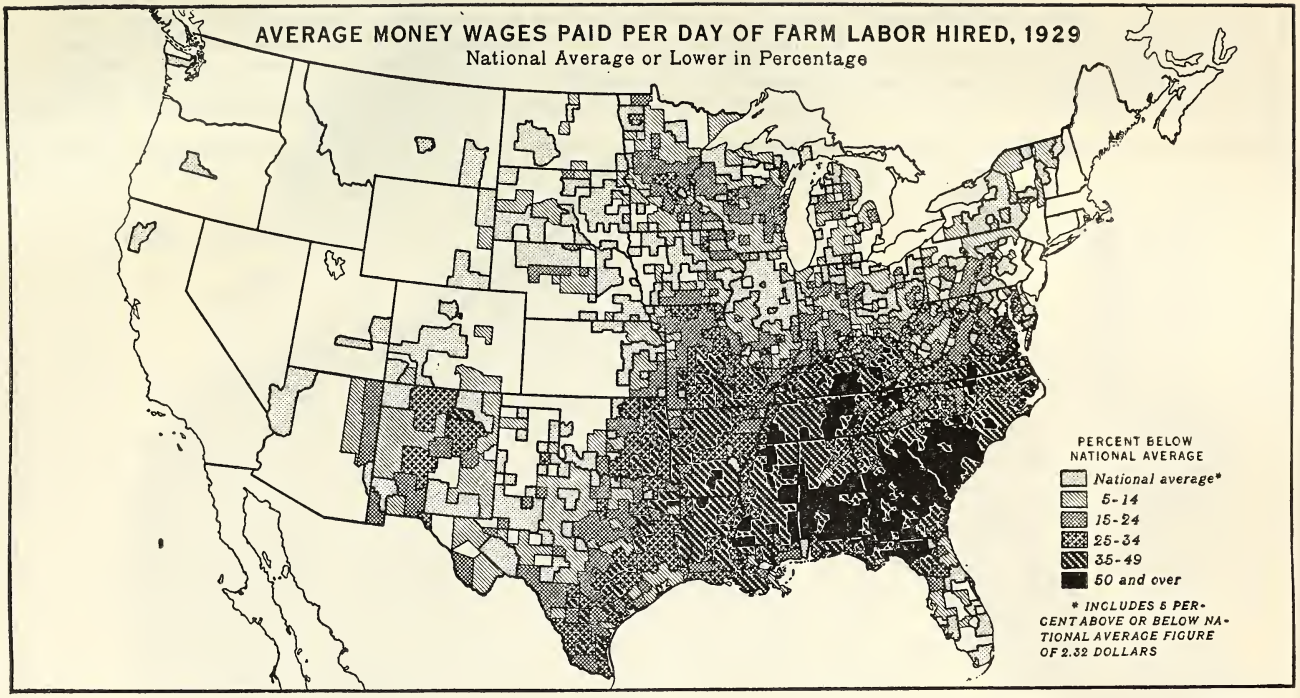


FIGURE 18.—In no Southern State did the daily wage for farm labor in 1929 reach the national average, and in most of these States it was 25 to 50 percent below. The lowest wage area stretched from southern Virginia south and west to eastern Texas, thence north into the Ozarks of Missouri, and included nearly all of Kentucky and Tennessee. Low wage rates in the South are largely due to the low grade of work offered, to the large supply of unskilled labor available, to low prices for farm products, and to the low nonagricultural demand for labor. Nearly all of New Mexico, Missouri, Wisconsin, and most of Minnesota, Iowa, and Indiana were characterized by a wage below the national average.

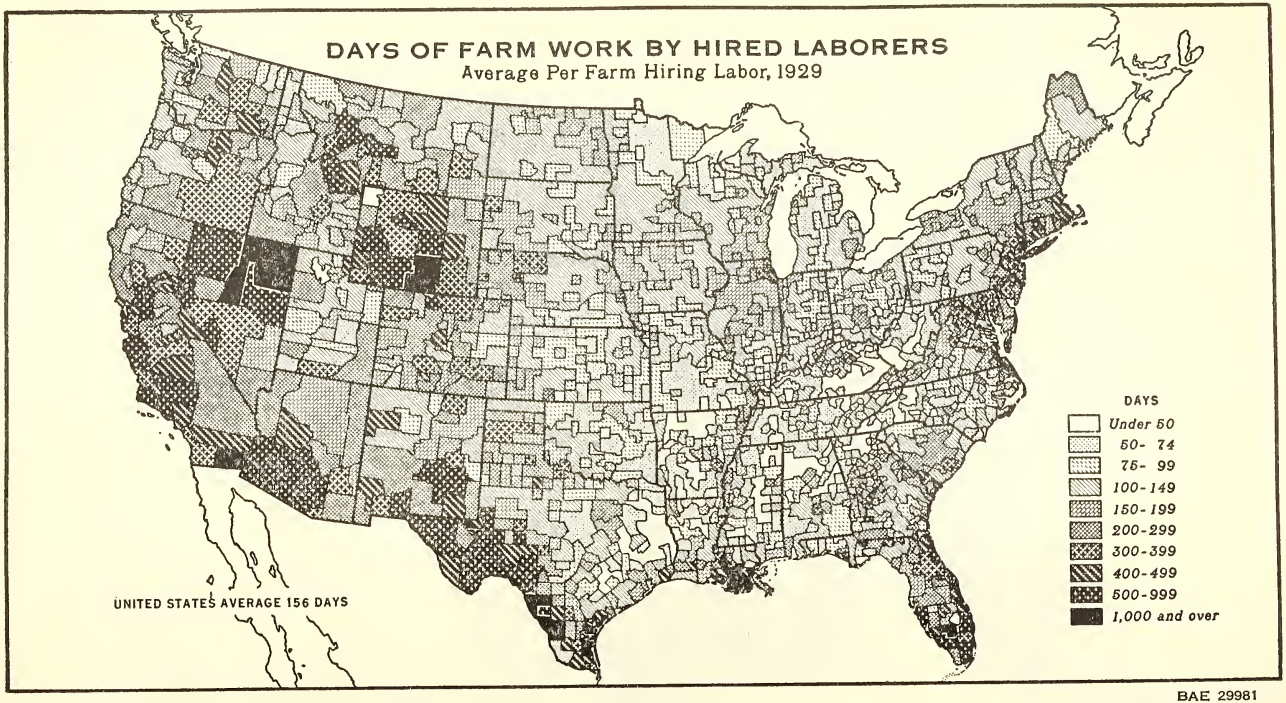


FIGURE 19.—The largest number of days of hired labor per farm hiring it were reported in 1929 by the fruit and truck farms of the eastern, southern, and western coasts, the large sugar plantations of Louisiana, and the large livestock ranches of the far West. Conversely, the fewest days of hired labor were reported from areas where the agriculture is predominantly self-sufficing, and from several less-commercial areas in the Cotton Belt. On fruit farms, truck farms, and sugar plantations a large volume of labor is needed during certain crop-culture operations, particularly harvesting. But on the stock-ranches of the far West, the extensive acreage of the ranch requires large amounts of labor.

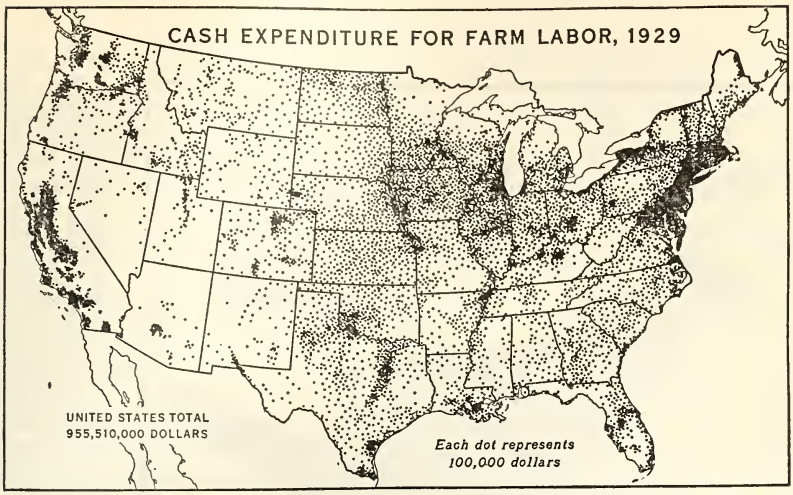


FIGURE 20.—In 1929, American farmers paid $955,510,000 for wages to hired farm laborers. In addition, board and lodging were provided to many laborers. High-expense areas include the Coastal Plain from Virginia to Massachusetts, the New York fruit districts, the dairying and corn- and hog-producing sections of the North Central States, a few truck- and fruit-crop producing districts in the South, and many irrigated areas of the West. California's labor expense was highest. The eastern Cotton Belt avoids high cash expenditure by use of share tenants and croppers instead of wage laborers.

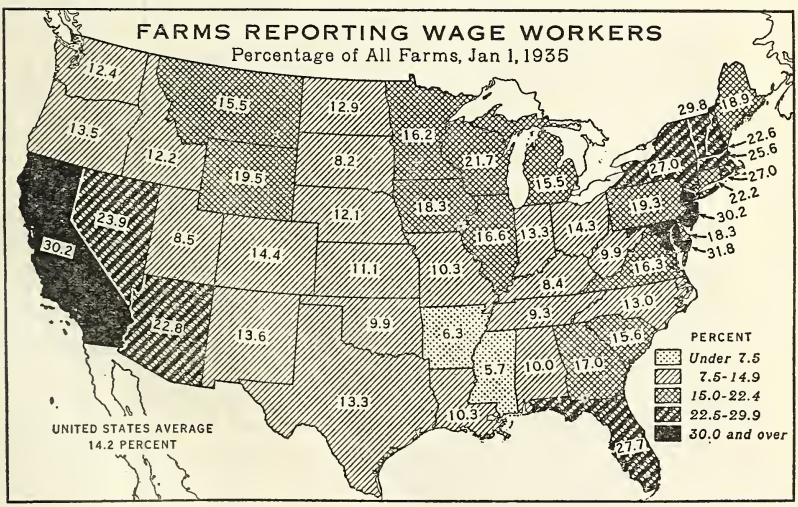


FIGURE 21.—One-seventh of the farm operators employed wage workers for 2 or more days during the first week of January 1935. Relatively steady year-round labor demands on livestock and dairy farms account for large proportions of farms reporting wage workers in January in New England, New York, New Jersey, Maryland, and Wisconsin; similarly with cattle and hogs in Illinois and Iowa; and cattle and sheep ranches in several Western States. Truck- and fruit-farm operations are practically at a standstill in January, except in parts of Florida and California. Few Wheat Belt farmers hire labor in January.

153759°—37——3

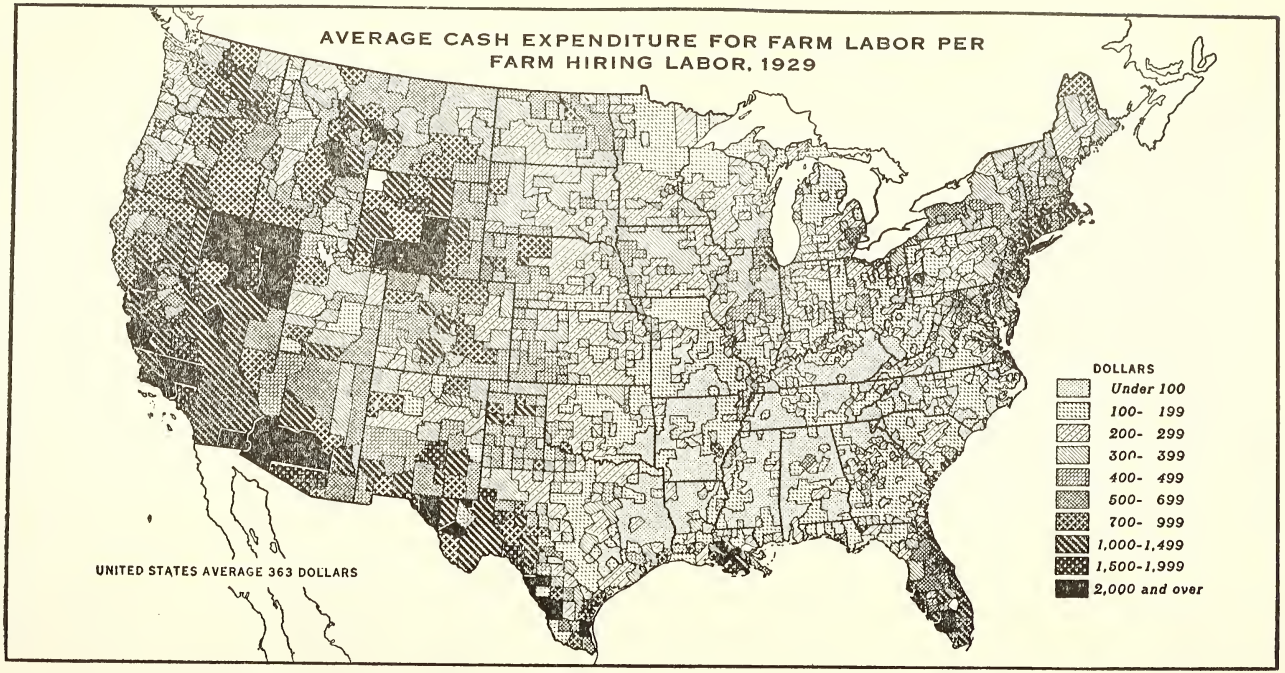


FIGURE 22.—Expenditures per farm for labor are influenced by type of farming, size of farms, use of machinery, availability of labor, character of labor supply, and by competitive wage rates near industrial sections. High average expenditures per farm are frequent in California and in the Grazing and Irrigated Crops Belt, where large livestock ranches and irrigated truck, sugar-beet, and fruit farms require much labor. Costs per acre average low on the stock ranches and high on the irrigated farms. Labor expenses per farm are very low in the Southeast where a small proportion of the farmers hire small amounts of labor at low wage rates.

FARM POPULATION

The farm population of the Nation supplies the nonfarm population with much more than food and fibers. During the decade 1920–29 about 40 percent of the youth who started to work in the factories, offices, and stores of the cities came from the farms—for probably two decades on the average, they had been fed, clothed, and educated by the farming people, and were then provided practically free of cost, to the cities, ready for life's work.[1]

This contribution appears likely to be even more important in the future than it has been in the past. Ten adults in the large cities (those over 100,000 population) are now raising only 7 children. Should the birth rate fall no farther, these 7 would raise only 5 children, these 5 only 3½. In three generations, or a century, number of births in these large cities would decline to about one-third that at present, were there no immigrants from outside, and later population would fall to a similar proportion. In the farm population, on the other hand, 10 adults are now raising about 14 children. Again assuming a stationary birth rate, these 14 would raise about 20 children, these 20 about 28. Population would almost treble in a century, were there no net migration from the farms. Birth rates probably will continue persistently to decline, rural as well as urban, but if the past forecasts the future the rural decline will be less rapid than the urban.

The significance of these ratios resides in the prospect that 1,000 farm people probably will have three to seven times as many descendants a century hence as 1,000 people living in our large cities—three times as many if the predepression proportion of farm youth leave the farms for the cities, seven times as many if there be no migration from farms.

The cities have an interest in the farm population. If the urban birth rate continues to fall, the middle-aged and elderly in the cities will become increasingly dependent on the rural regions for youth to do their daily toil.[2] The number of children under 5 years of age in the urban population has decreased probably 20 percent during the last 10 years, and the number of persons over 65 years of age has increased, probably, 50 percent.[3] According to the present trend in the Nation as a whole there will be twice as many people over 65 years of age 25 to 30 years hence as there are today, and about three times as many 50 years hence. These people are living now and the number can be estimated within a small error by using life expectation tables. Such an estimate assumes freedom from war, famine, and pestilence.

The Nation as a whole clearly has an interest also in the rural population for, in all likelihood, most of the citizens a century hence will be descendants of the rural people of today. Among the rural people the birth rate generally is highest, and doubtless will remain highest, among people living in the less fertile areas. Apparently, the people who will provide, immediately or eventually, the surplus

[1] The net migration from farms during the decade 1920–29 was about 6,300,000. If it cost $2,250 to feed, clothe, and educate the average farm child to the age of 15—certainly $150 a year is not an excessive estimate; in some States education alone costs this much—then this migration represents a contribution of roughly $14,000,000,000. In addition, settlement of farm estates probably transferred $4,000,000,000 to $5,000,000,000 to heirs who had moved to the cities.

[2] In a group of nine apartment houses in Washington, D. C., containing 104 apartments, 23 owned by widows and unmarried women and 81 by families, nearly all married couples in early middle age, there are only 34 children, and 3 of these are in 1 family.

[3] The decrease of children under 5 years of age in the Nation as a whole was about 17 percent, and in the urban population probably was larger. The increase in persons over 65 years of age in the urban population was 50 percent between 1920 and 1930, and because of the aging of the population and the slight migration of old people from the cities (apparently youth and middle aged mostly returned to farms and villages during the depression) it appears almost certain that a similar rate of increase has persisted.

youth to the cities, and to the farms and villages in the more fertile areas from which the youth have gone to the cities, will be principally the mountaineers of the southern Appalachians and the Ozarks, the less commercial farmers of the Cotton Belt, the miners of Pennsylvania and West Virginia, the hill folk along the Ohio River and its tributaries, the pioneers of the upper Great Lakes region, the Mennonites and similar foreign stocks of the Dakotas and Kansas, the Mormons of Utah and Idaho, and other, mostly small, and often more-or-less self-sufficing farmers, who have been partially isolated by their environment or other conditions from the influences of modern urban civilization. (See figs. 50 and 51.)

Whether the youth who migrate from these areas to the cities and the better farming regions will be educated and prepared for life's labors, or will remain more or less ignorant and unskilled, joining in large numbers the groups of the unemployed, will depend not only upon local resources, and school facilities which are generally meager, but also upon national policy. These youth in the poorer regions constitute a great national problem, but also a great national resource.

How best to conserve and use this basic resource of the Nation is not yet clear. The need is urgent, with more than a million survivors of the back-to-the-land movement during the depression still on farms in these regions January 1, 1935, and with another million or more youth backed up on farms in these regions who would under predepression conditions have migrated to the cities. In some counties in these regions a third to a half of all the families were on relief on that date. Education, both of children and adults, appears to offer the greatest hope; but more than education is needed.

The maps and graphs that follow will, it is hoped, stimulate interest in this subject and lead to a fuller realization of the importance of the farm population in the national economy, and of the need "to preserve for human society the native values of rural life." [4]

[4] This inscription appears on the frieze of Hilgard Hall at the University of California in Berkeley.

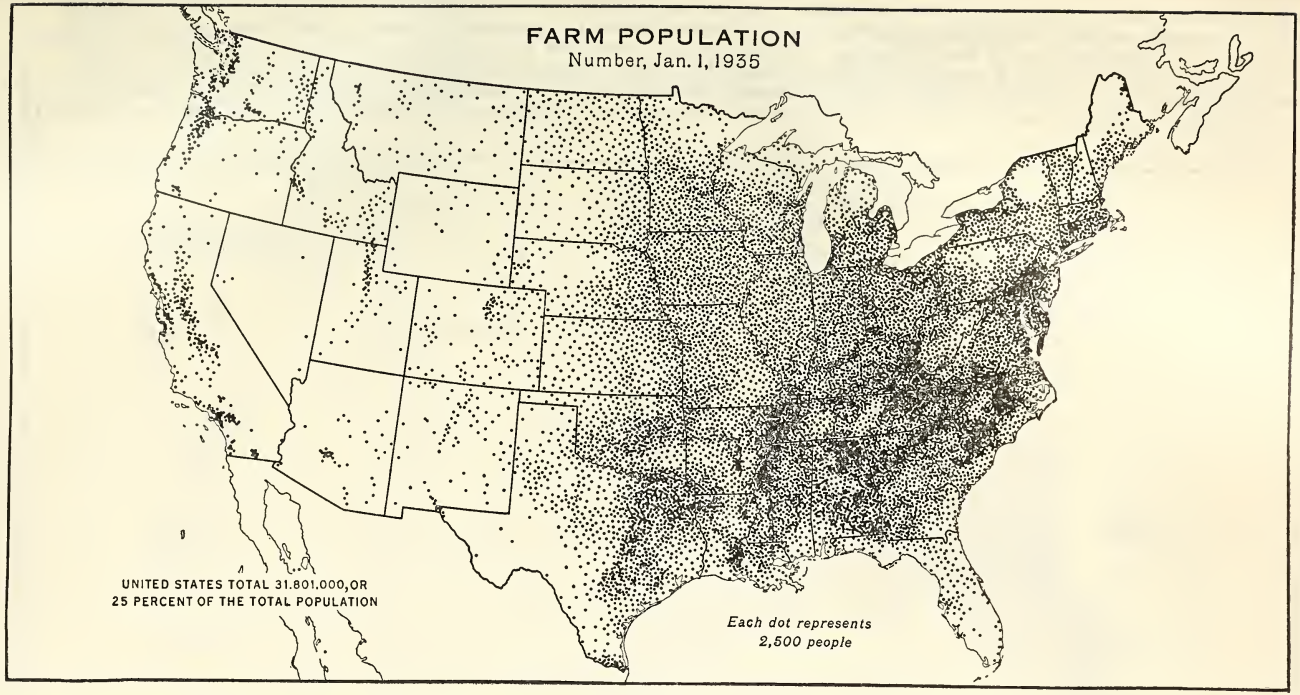


FIGURE 23.—About one-half of the farm population of the United States live in the Southern States (south of the Potomac and Ohio Rivers and in Arkansas and Louisiana, Oklahoma, and Texas), four-tenths in the Northern States, and less than one-tenth in the 11 far Western States. Farm population constitutes 44 percent of the total population in the South, 17 percent in the North, and 19 percent in the far West. Twenty-seven percent of the farm population in the South is Negro or mulatto. Only 23 percent of the colored farm operators in the South own their farms, as compared with 52 percent for white farmers. In the North 66 percent and in the West 77 percent of the farm operators, nearly all white, own their farms.

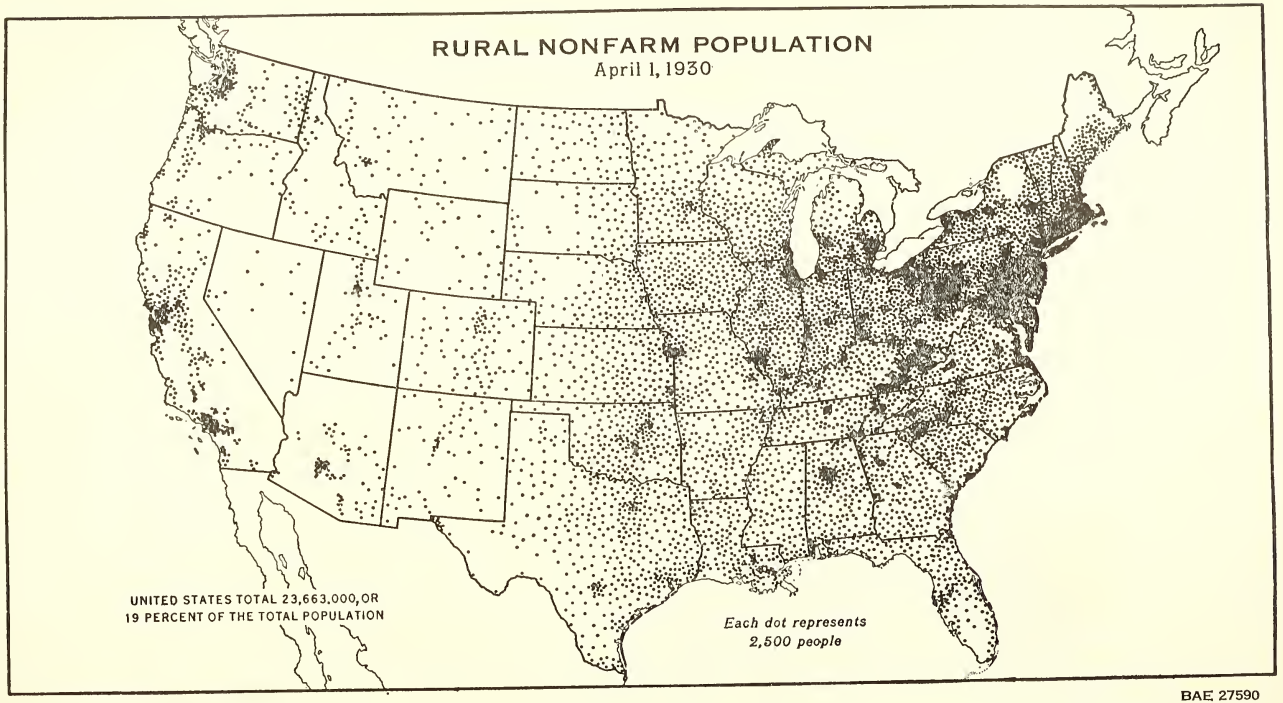


FIGURE 24.—Rural nonfarm population includes people outside of towns of 2,500 population and over, but not living on farms. It is partly suburban (note the concentration around the large cities on the map), partly industrial and mining (note the density in southern New England, the coal-mining districts of Pennsylvania and West Virginia), partly rural village (note the even distribution in the Corn Belt and much of the South). Whereas rural farm population is densest, in general in the South, rural nonfarm population is densest north of the Potomac and Ohio Rivers and in California. The characteristics of the rural nonfarm population are varied, but in birth rates and social attitudes the people resemble the farm population more than the urban.

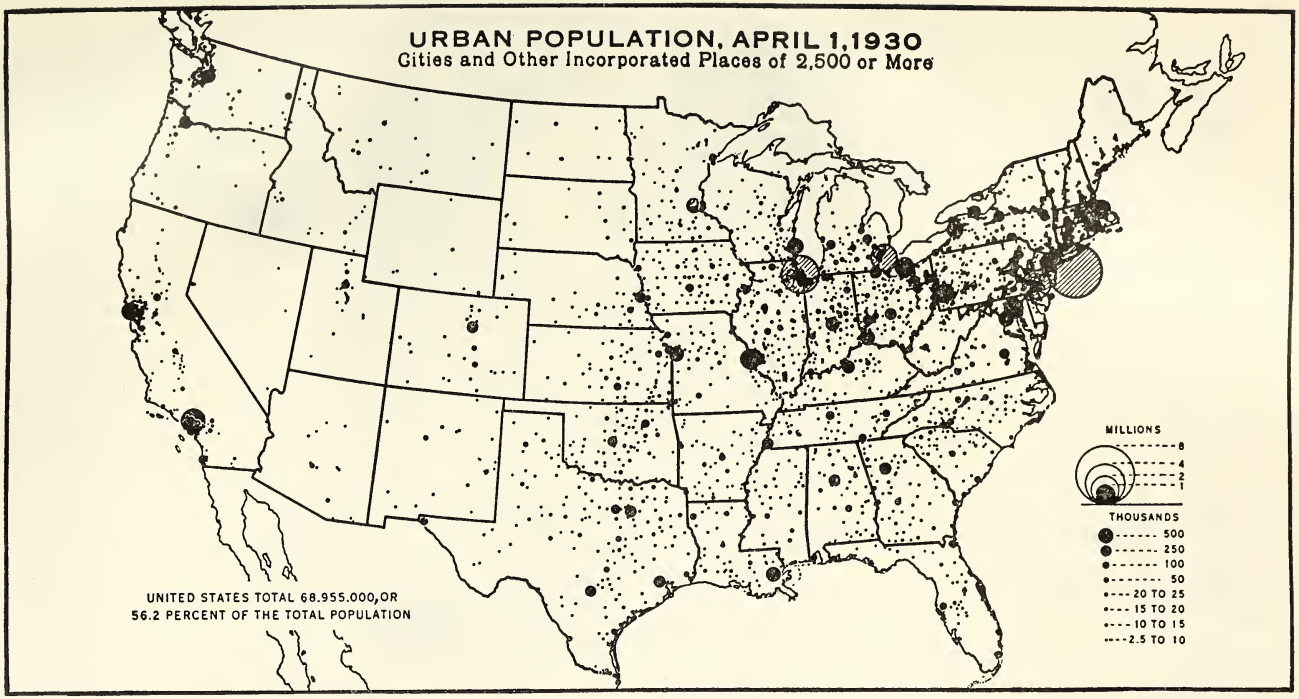


FIGURE 25.—Over half of the urban population in the United States live within the Hay and Dairy Belt. The urban population in this region constitutes nearly three-fourths of its total population and over one-fourth of the total population of the United States. Into this region the food and fibers of the West and South constantly move. The center of urban population, however, is located in the eastern portion of the Corn Belt, in Ohio, whereas the center of agricultural production was over 400 miles to the west, in Missouri. Outside the Hay and Dairy Belt the principal centers of urban population are found along the northern margin of the Corn and Winter Wheat Belt and on or near the Pacific coast.

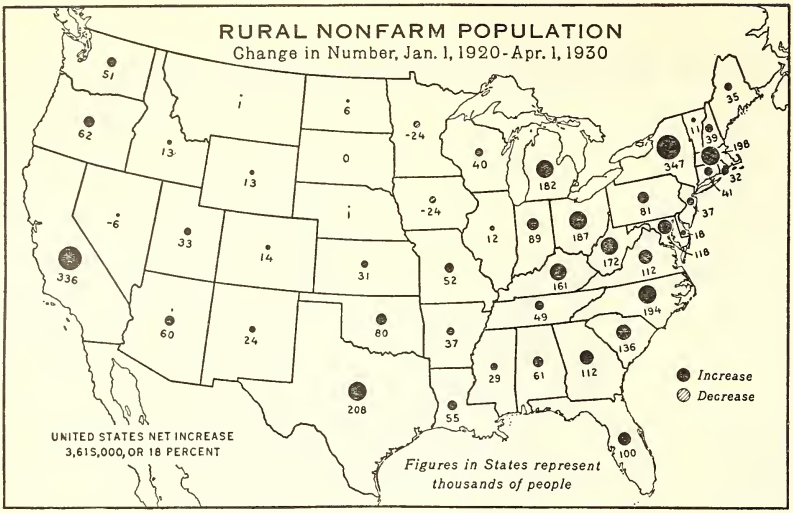


FIGURE 26.—The increase of rural nonfarm population (village and suburban mostly) between 1920 and 1930 was widespread. About 40 percent took place in the States north of the Potomac and Ohio Rivers and east of the Mississippi, and over 30 percent in the States to the south, while 12 percent occurred in the Pacific Coast States. Notable increases are shown in the Southwestern States. On the other hand, a decrease is indicated in Iowa and in Minnesota, and the increase was little or nothing in the Great Plains States to the west.

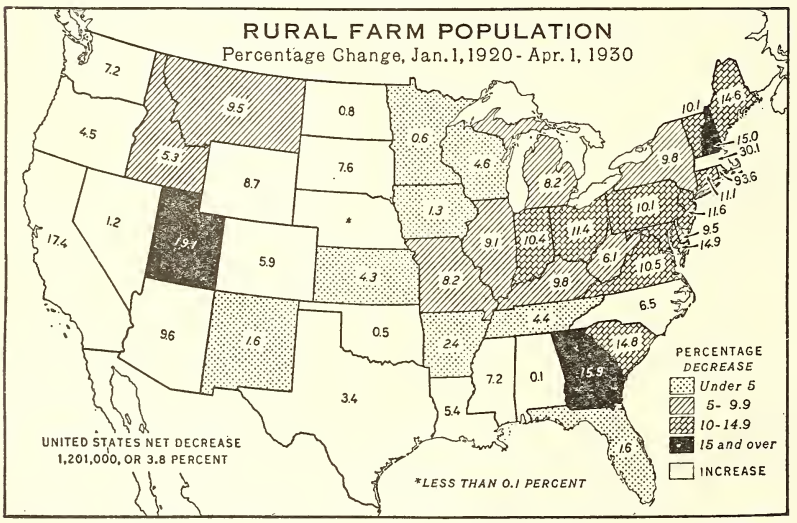
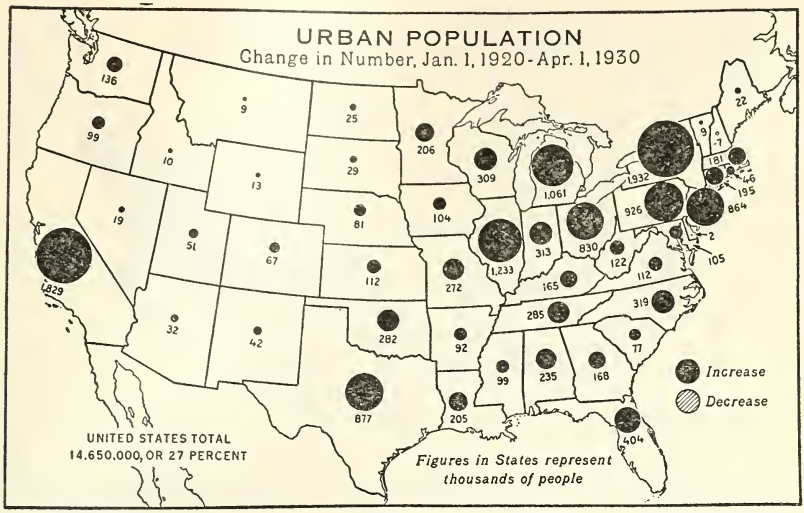
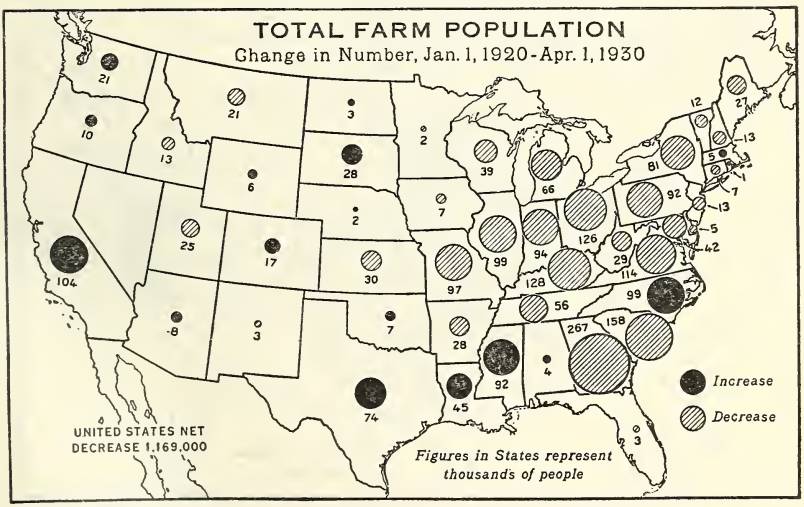


FIGURE 27.—The decrease in farm population in Utah, Georgia, and New Hampshire between 1920 and 1930 exceeded 15 percent of the 1920 farm population and was almost as large in South Carolina, Maryland, and Maine. Important factors in accounting for the decreases in farm population were: In Utah, limited water supply and well-educated youth; in Georgia and South Carolina, soil erosion and the boll weevil, and high wages in the cities; in northern New England and in most of the Northeastern States, progress in agricultural technique and economic opportunities in the cities.



BAE 25261

FIGURE 28.—About 70 percent of the increase of urban population occurred in the States north of the Potomac and Ohio Rivers and on the Pacific coast. Industrialization in Texas and Oklahoma (in part based on oil), and in the southern Appalachian and Piedmont areas (cotton mills and furniture factories largely), accounted for most of the remaining increase. Even the urban population increased only slightly in the agricultural heart of the continent—Kansas to Iowa and Montana. Migration from rural areas accounted for 40 percent of the national increase in urban population, and immigration from foreign lands for about 20 percent.



BAE 23922

FIGURE 29.—The decrease in farm population was almost universal between 1920 and 1930 north of the Cotton Belt and east of the Missouri River. Urban prosperity and reduction of foreign immigration pulled farm youth to the cities, while low prices for farm products and progress in agricultural technique pushed them from the farms. Notable decreases occurred also in Georgia and South Carolina, where soil erosion and the boll weevil caused great devastation. But in North Carolina, Mississippi, Louisiana, and Texas the natural increase was greater than net migration from farms, and the West still beckoned to farm-seeking youth.

153759°—37——4

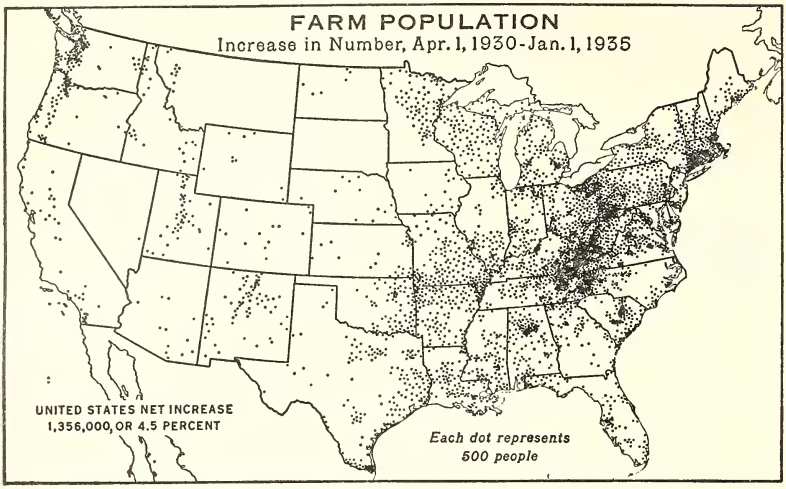


FIGURE 30.—The increase in farm population during the depression years was greatest in the Appalachian Mountain region, extending from New England to northeastern Ohio and northern Alabama. In this region migration from the farms had been heavy before the depression, and many of these migrants were forced by unemployment and lack of capital to return "home" early in the depression, to seek shelter and sustenance or to occupy some abandoned farm. In the southern Appalachian region, where the birth rate is high, there was a "backing up" on the land, in addition to this back-to-the-land movement.

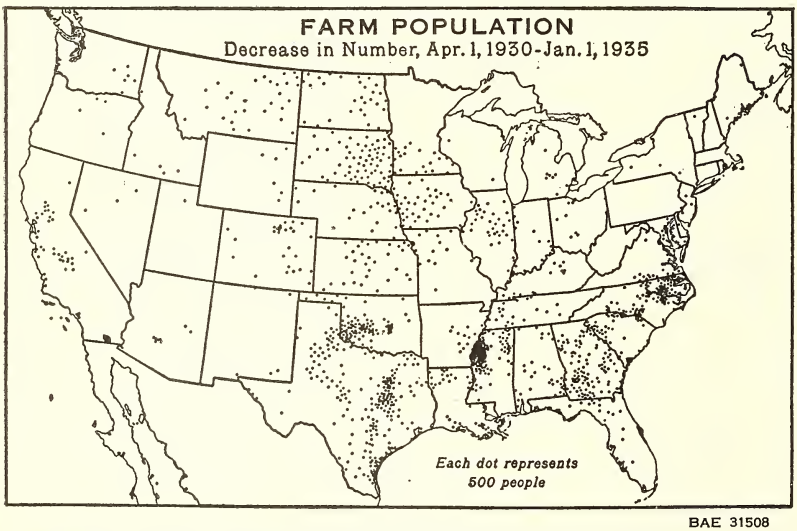


FIGURE 31.—The decrease in farm population between 1930 and 1935 occurred mostly in the cropper districts of the Cotton Belt, in the Corn Belt, and in the Wheat Belts. In these regions commercial farming is characteristic of the agriculture, and in the Cotton and Corn Belts tenancy also. Negro tenants, including croppers, in the South declined approximately 70,000 between 1930 and 1935, mostly in highly commercialized cotton districts; white tenants, including croppers, increased 110,000, mostly in the less commercial areas.

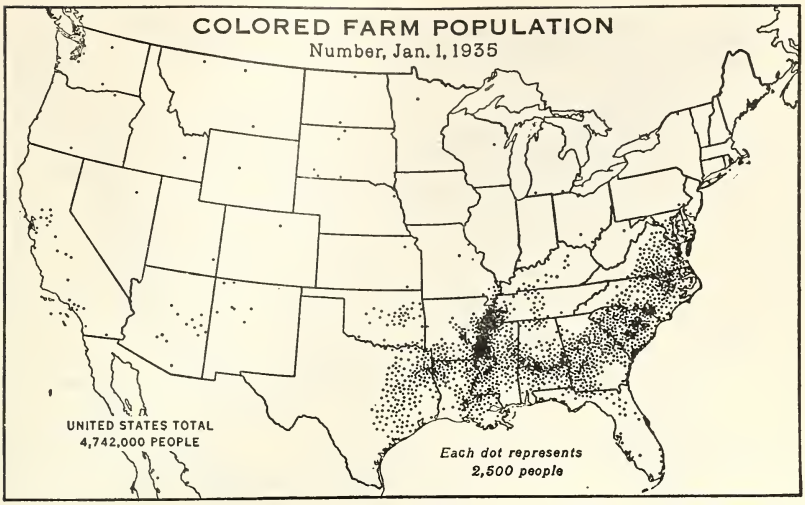


FIGURE 32.—Colored farm population, mostly Negro, is almost wholly confined to the Cotton Belt, except that it extends northward into eastern Virginia and Maryland, a plantation area in precotton days from which many slaves were sold to the South. A few thousand native Indian farmers live in the Lakes States, the Dakotas, Montana, New Mexico, and Arizona. The dots in California represent mostly Orientals. In South Carolina and Mississippi the colored exceeds the white farm population. There are less than 100,000 colored farmers in all the Northern States, and about 140,000 in the 11 far Western States.

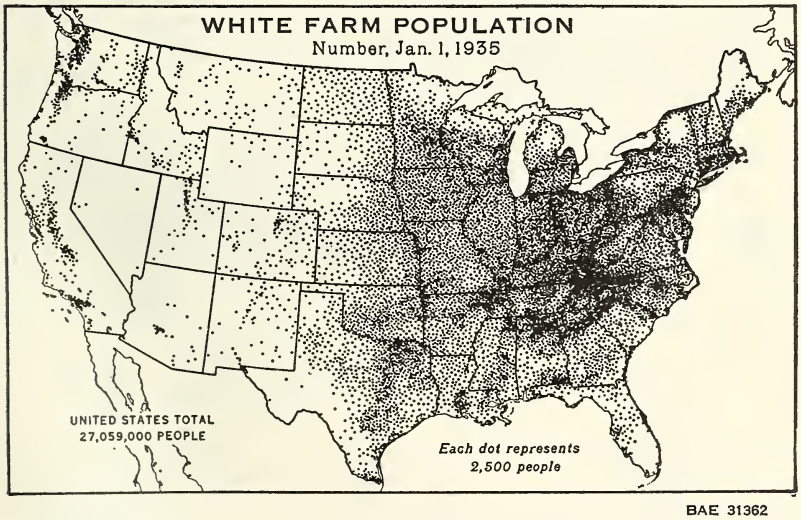


FIGURE 33.—Farm population of the white race is densest in the southern Appalachian Mountains, on the Piedmont to the east, and on the Highland Rim area to the west, yet in these areas only 10 to 30 percent of the land is in crops. But the birth rate is high. Southeastern Pennsylvania, Ohio, and eastern Wisconsin also have a dense farm population. All these areas are characterized by rather small farms. The valleys of the Pacific coast, where most fruit and truck farms are small in area, are also now becoming districts of dense farm population.

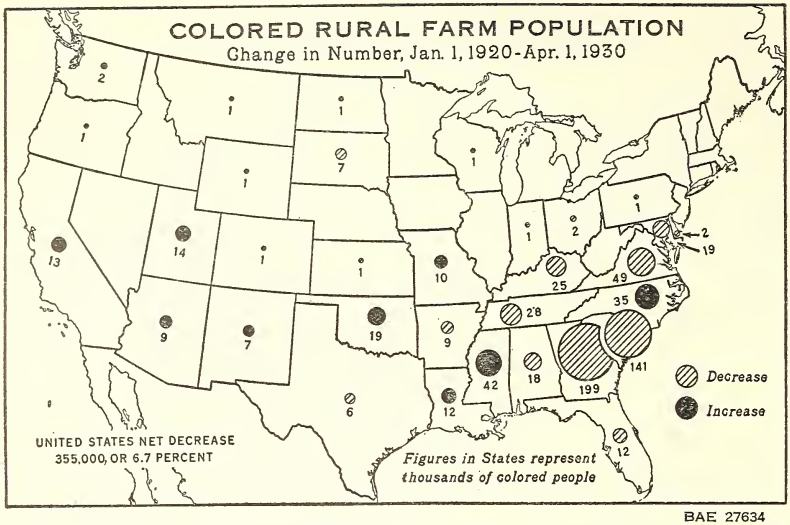


FIGURE 34.—The heavy migration of colored people from the farms of Georgia and South Carolina to the cities during the decade of urban prosperity preceding the depression (see fig. 42), is reflected in the map above. In North Carolina, Mississippi, Louisiana, Oklahoma, and Missouri the natural increase (excess of births over deaths) was greater than the net migration from the State, and the colored farm population increased. In New Mexico and Arizona the increase was mostly native Indian, in Utah both Indian and Oriental, in California mostly Oriental. Mexicans are included with the white population.

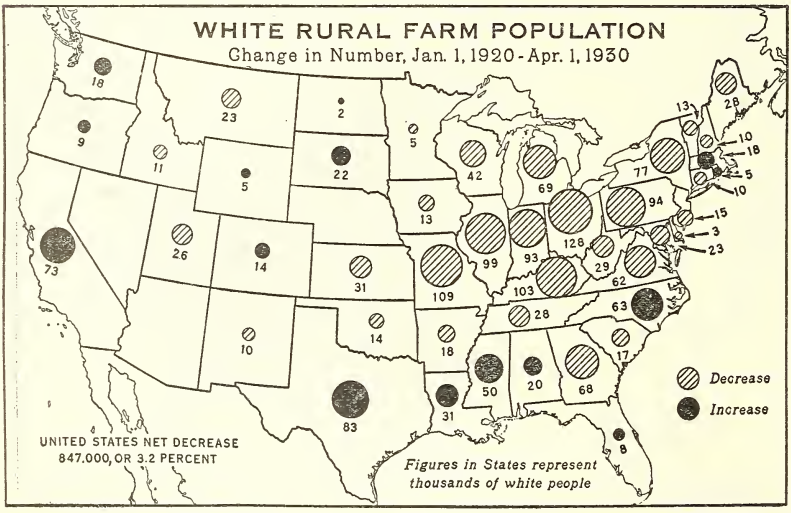


FIGURE 35.—The decrease in white rural farm population between 1920 and 1930 occurred mostly north of the Cotton Belt and east of the Great Plains. In much of this area industrial development was rapid, and the high urban wages attracted young men and women from the farms. In addition, the prices of most farm products were low, and farming was generally unprofitable. The increase in white farm population in the South was largely the result of the high birth rate, while that on the Pacific coast was due mostly to migration from the States to the East.

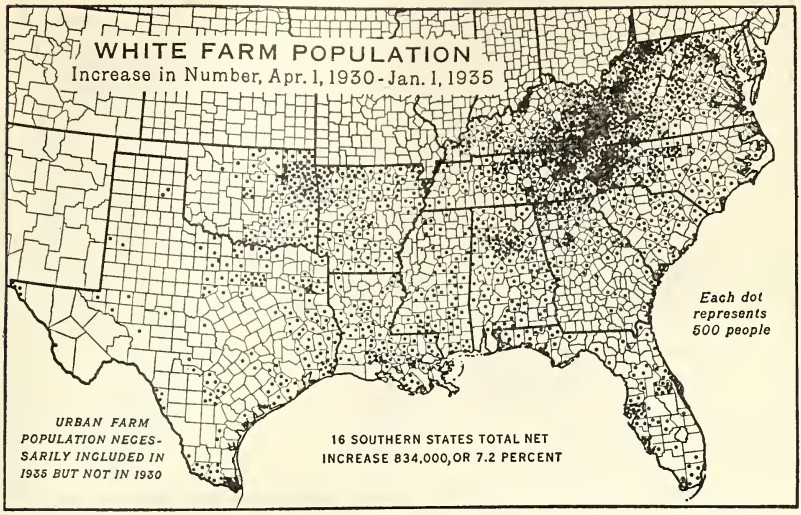


FIGURE 36.—Notable changes in farm population occurred in the Southern States during the depression. Thousands of mountain people who had gone to the cities to work returned to their former homes in the Appalachian and Ozark areas as urban unemployment increased; while, owing to the high birth rate, other thousands, mostly youth, unable to obtain work in the cities, were backed up on farms. This great increase of white farm population in the South took place mostly in districts of relatively poor soil, and around some of the cities, notably, Birmingham, Alabama.

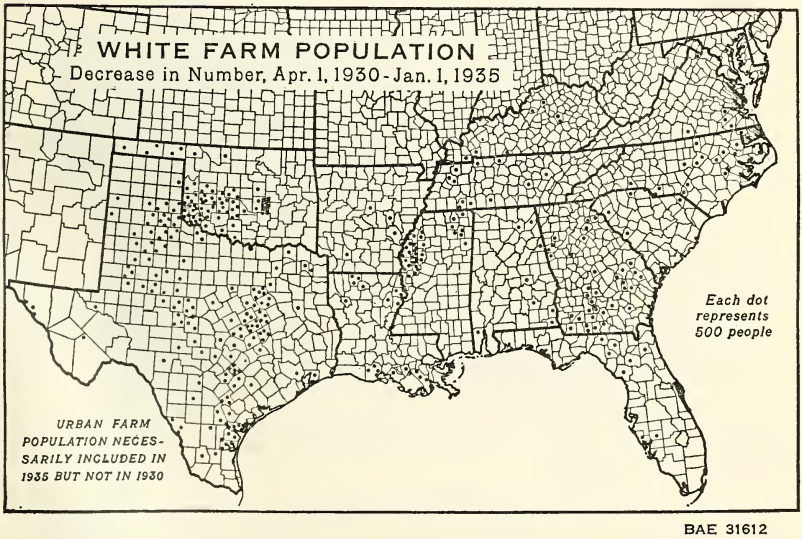


FIGURE 37.—The three outstanding areas of decreases in white farm population in the South during the depression—the Yazoo delta in Mississippi, the Black Waxy Prairie in Texas, and southwestern Oklahoma—are notable cotton-producing areas. Apparently, the low price of cotton and the economic depression, which led plantation owners to reduce the number of tenants, the agricultural-adjustment program, a diminishing population per farm, and other factors, induced a decrease even in the white population in these districts of highly commercial agriculture.

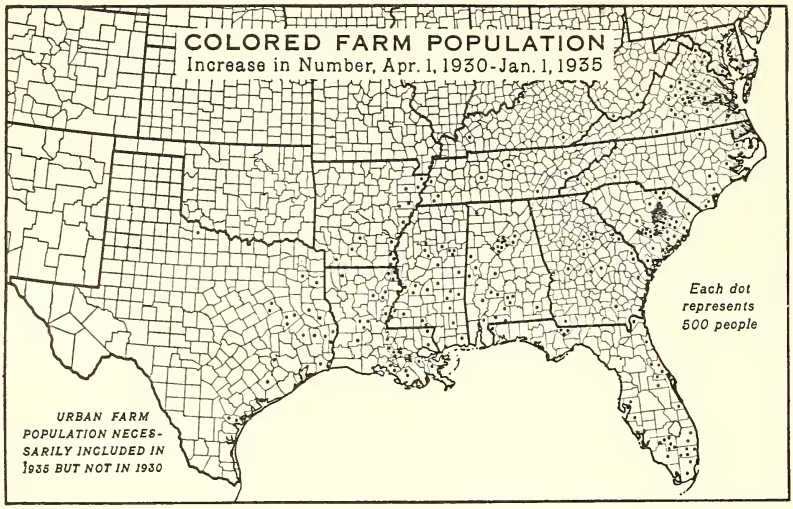


FIGURE 38.—The increase in colored farm population in the South was small between 1930 and 1935. Increases occurred mostly in central Virginia, the Coastal Plain of South Carolina, around Birmingham, Ala., in extreme southern Florida, and along the western side of the Mississippi River from Missouri to the mouth. Except in the Mississippi delta counties, these increases occurred mostly in districts of poor soils and high birth rates. This map indicates the difficulties that the southern Negro farmer had in retaining his toehold on the land during the depression.

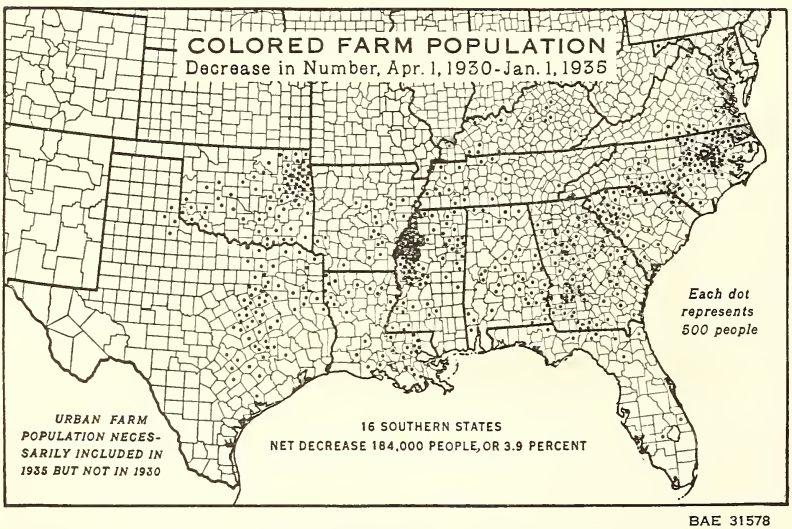


FIGURE 39.—Negro cropper and tenant farms decreased 70,000 in the South during the depression years. The decrease was greatest numerically in the tobacco districts of eastern North Carolina, in the fertile cotton-growing Yazoo delta in Mississippi, in northeastern Oklahoma, on the margin of the Cotton Belt, and in the productive Black Waxy Prairie of Texas. Probably some of these Negro families were still on the plantations in 1935, being supported largely from relief funds; others doubtless had moved to southern cities, and some had gone North.

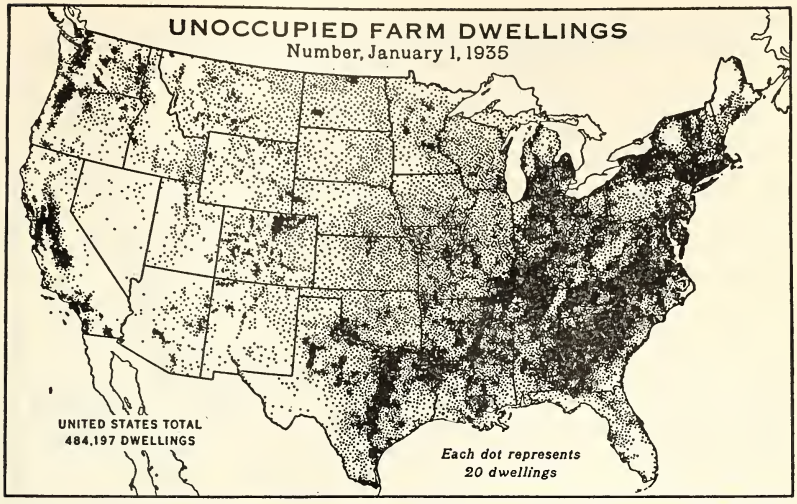


FIGURE 40.—Despite 2,000,000 people living on farms who had not been living on farms 5 years before, and the backing up of about as many youth on farms who, under predepression conditions, would have migrated to the cities, there were nearly 500,000 unoccupied farm dwellings reported by the census of January 1, 1935. These unoccupied dwellings were most numerous on the Piedmont, extending from Alabama to Maryland, in New England, New York, Michigan, central Indiana, and much of Ohio, Kentucky, and Tennessee, in the Black Prairie of Texas, and in the valleys of the Pacific coast.

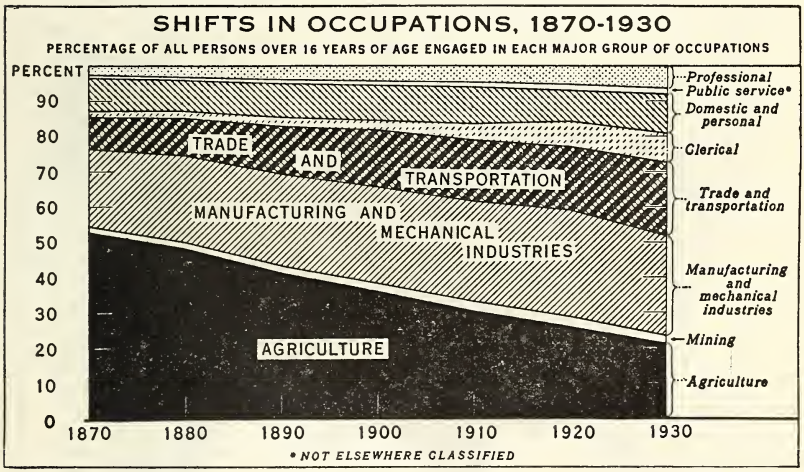


FIGURE 41.—Advances in agricultural technique, particularly the increase in use of power, has induced a great cityward migration of young farm people and a decrease in the proportion of the population engaged in agriculture. Until about 1920 these rural youth found employment in manufacturing, mining, distribution, and the services. But soon after 1920 a decline started also in the proportion of the population engaged in mining and manufacturing. As a consequence, trade and clerical work and various services are absorbing young people who are no longer needed in the basic productive industries, and many remain unemployed. [Adapted from a diagram by Hurlin and Givens in Recent Social Trends in the United States, New York, 1933.]

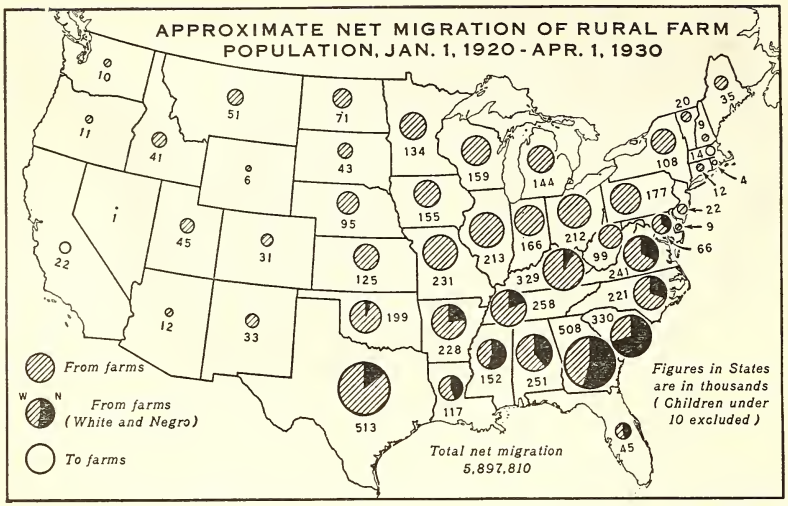


FIGURE 42.—About 60 percent of the 6,000,000 net migration from farms during 1920–29 was from the South. Most of these migrants were young people. The birth rate is high among southern rural people, and economic opportunity was less than in the North. If it costs $2,000 to rear and educate a child to the age of 15 years on farms in the South, these 3,600,000 migrants from southern farms represent a contribution of $7,000,000,000 made during the decade by the farm population of the South to other parts of the Nation, mostly to the cities.

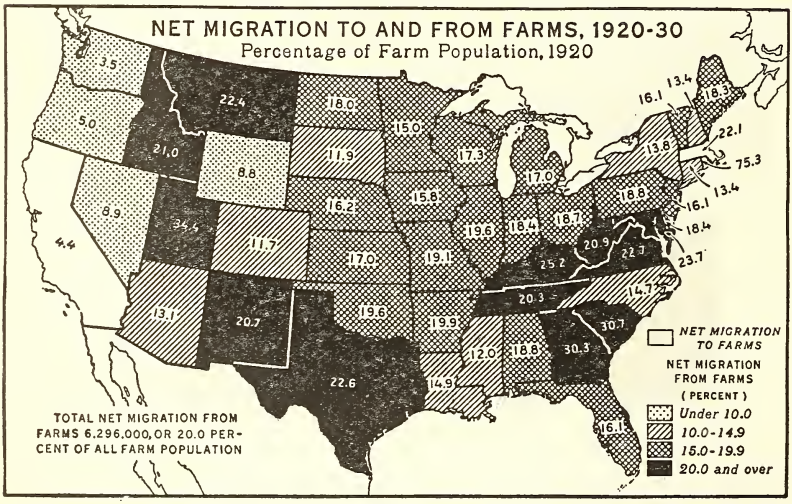


FIGURE 43.—Relative to the farm population in 1920, migration from farms exceeded 20 percent in seven Southern States, New Mexico, Utah, Idaho, and Montana. In these States the birth rate is high and the soils are poor to fair, or mostly arid. In the North the range in ratio was from 12 percent in South Dakota to nearly 20 percent in Missouri and Illinois, except that in Massachusetts and Rhode Island there was a net migration to farms. In California also there was a net migration to farms, and in Oregon and Washington the movement from farms was small.

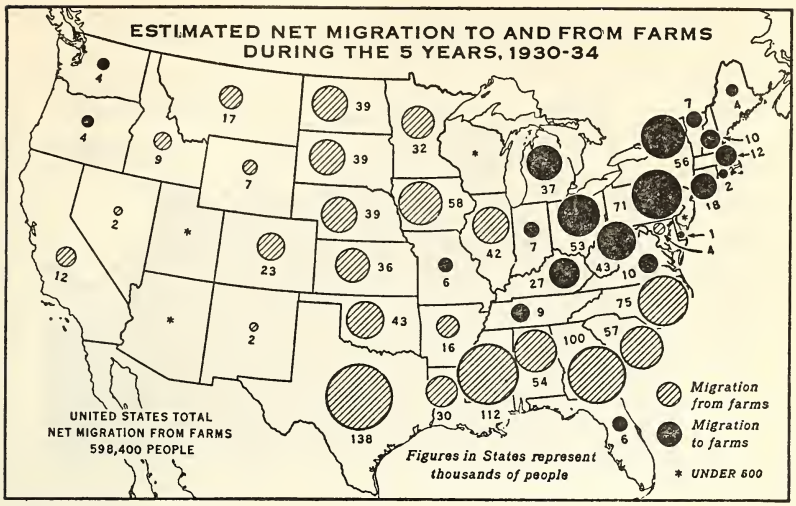


FIGURE 44.—From Tennessee and Michigan to Virginia and Maine, but excluding Maryland—that is, throughout most of the manufacturing belt and a little beyond—migration to farms during the depression years 1930–34, exceeded that from farms. These States are characterized also by dairying and general farming, and in the Appalachian Mountains by self-sufficing and part-time farms. In the Cotton Belt, in the prairie part of the Corn Belt, and in the Wheat Belt—areas of commercial agriculture and high proportions of tenancy in most parts—there is indicated a surprisingly large net migration from farms during the depression.

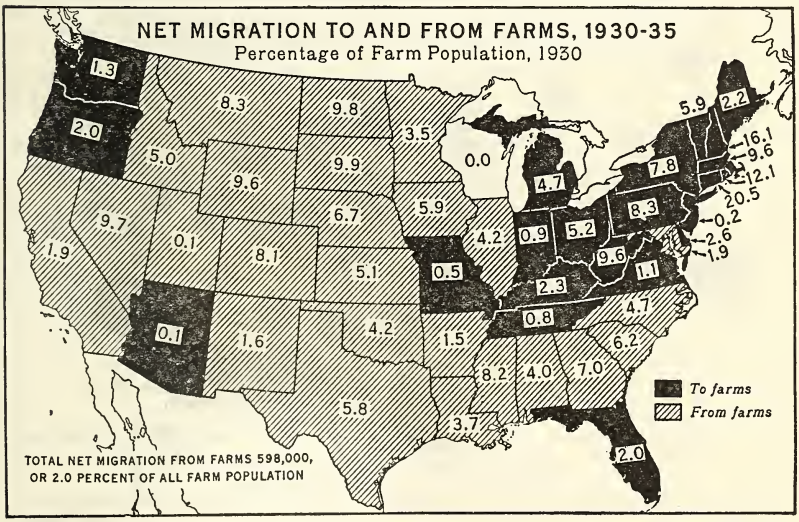


FIGURE 45.—In the manufacturing States of the Northeast the net migration to farms during the depression, consisting principally of urban unemployed with previous farm experience, increased the farm population by 5 to 10 percent in most of these States, and apparently by even more in parts of New England. On the other hand, the net migration from farms in the Cotton Belt, in the prairie part of the Corn Belt, and in the Great Plains States, would have decreased the farm population by 2 to 10 percent, had births not exceeded deaths.

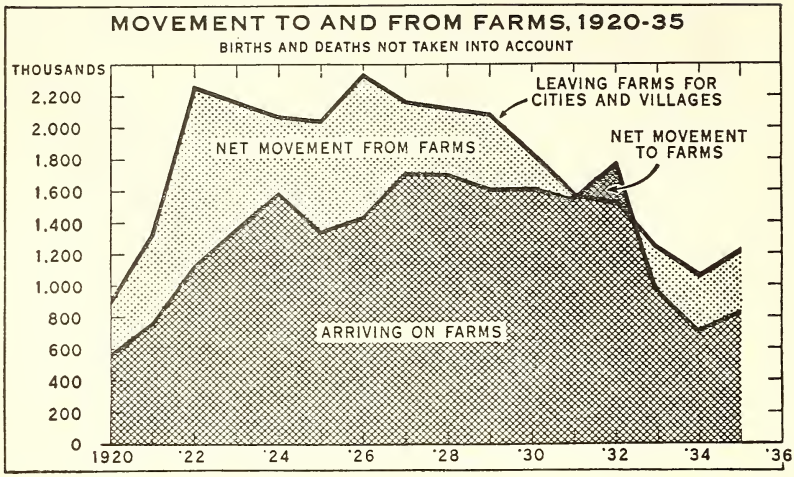


FIGURE 46.—From 1922 to 1929, inclusive, migration from the farms to the cities exceeded 2,000,000 each year—probably a larger movement than ever before in the Nation's history. Those were prosperous years in the cities and rather hard times for agriculture. But during those years many people returned to farms. The net migration from the farms during these 8 years averaged less than 700,000 annually. As the depression developed and jobs became scarce, the movement from farms dropped notably, while that to farms remained almost stationary through 1932, exceeding the movement from farms in 1932, but then fell to one-half.

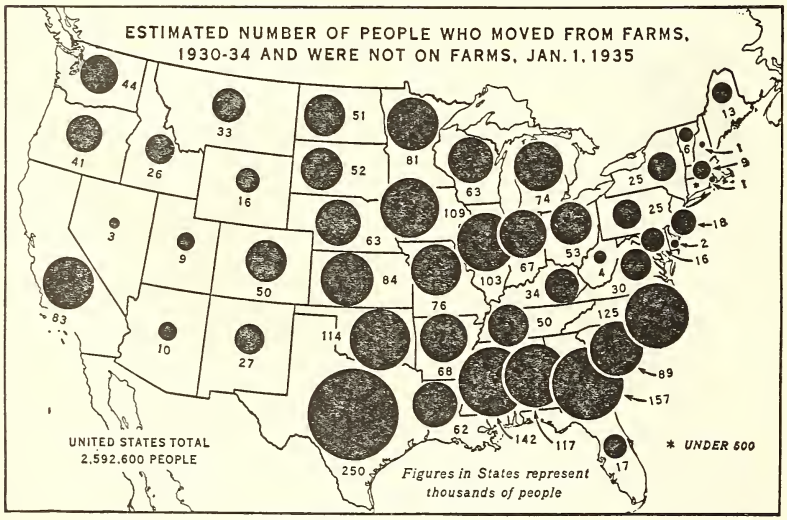


FIGURE 47.—The number of people who left farms during the years 1930–34 and had not returned by January 1, 1935, is estimated at nearly 2,600,000 in the Nation as a whole. About half of this migration was from the South. As compared with the natural increase, migration from farms was smaller in the South than in the North and West. Perhaps the more meager education, in general, of farm youth in the South retarded their movement to the cities, where so large a number of the unskilled laborers have been unemployed during the economic depression.

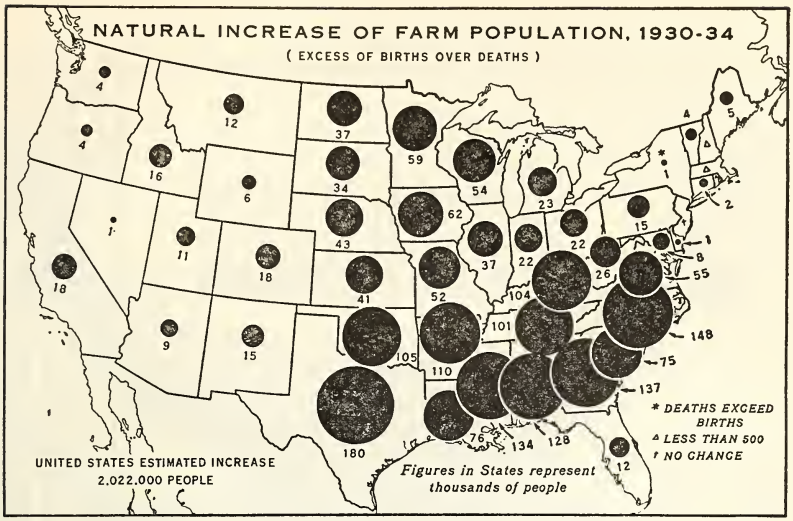


FIGURE 48.—Two-thirds of the natural increase in the farm population during 1930–34 occurred in the South, where only half the farm families are located. But the average value of farms in the South is only about one-third that in the North and West. The burden of feeding, clothing, and educating the farm children must be heavier in the South, or the levels of living and education must be lower. In reality both conditions exist. But it is evident that the citizens of the future are coming in increasing proportion from the farms of the South.

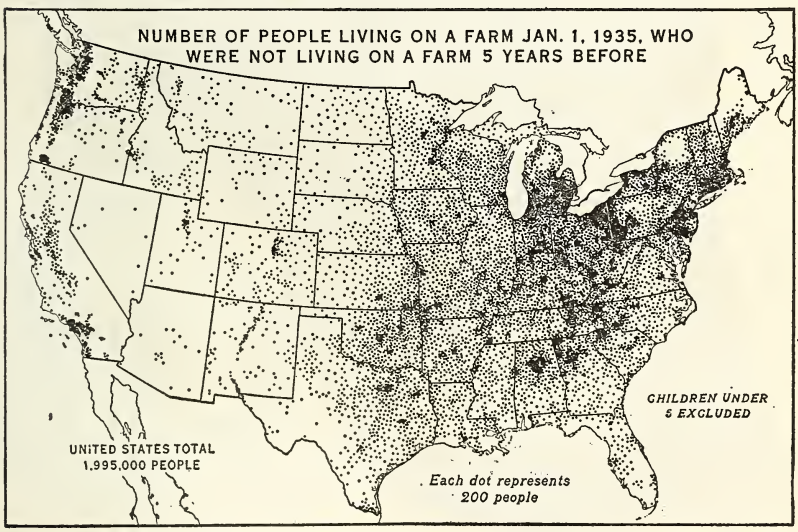


FIGURE 49.—The number of people living on farms in 1935 who were not living on farms 5 years before, exceeded the increase in farm population between 1930 and 1935, except in a belt extending from New Hampshire through southern New England, Pennsylvania, Ohio, and the Virginias to Tennessee, also except Florida, Arkansas, New Mexico, and Utah. Evidently migration from farms exceeded the natural increase in most of the States. Local surveys indicate that most of the survivors of the back-to-the-land movement are middle-aged with children, and they intend to remain on the land.

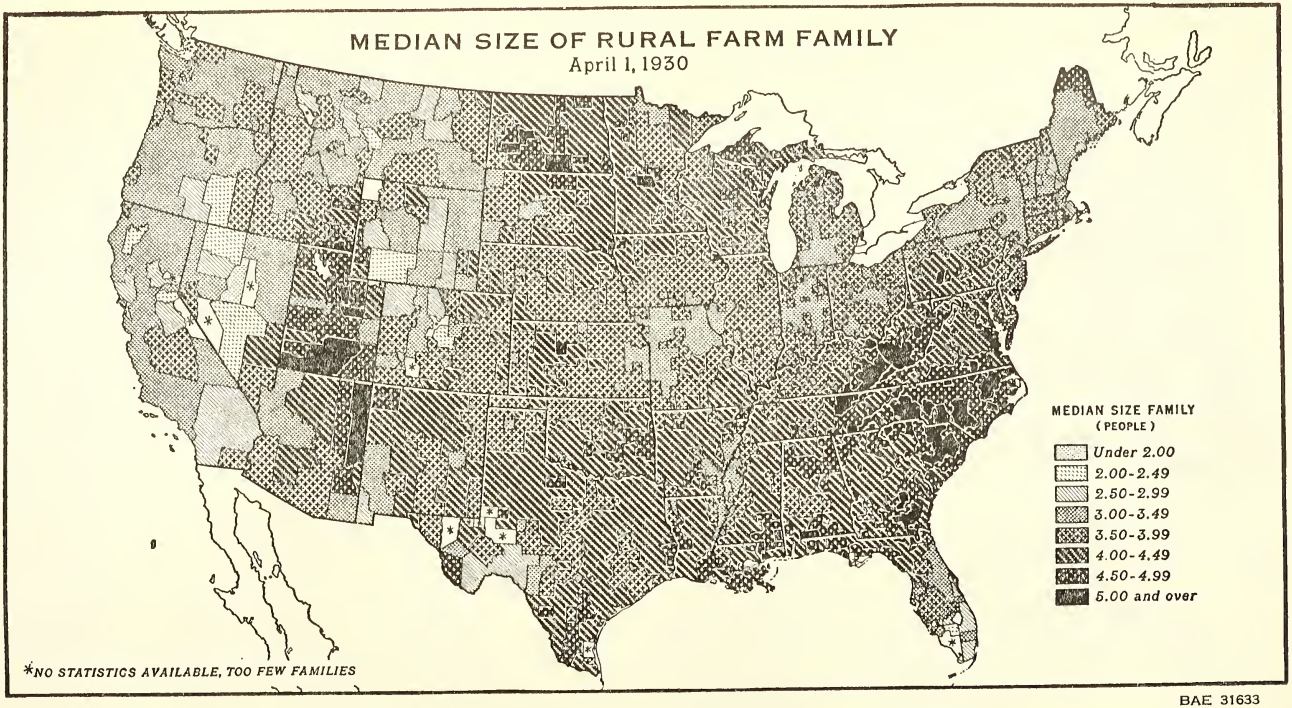


FIGURE 50.—The largest farm families—more than half have over five persons—live in the southern Appalachians and eastward across North Carolina and much of South Carolina. Such families are found also in a few counties of North Dakota and Utah, and one county each in Pennsylvania, Minnesota, Kansas, Idaho, and Arizona. Except for the counties in Kansas, North Dakota, and Minnesota these are all districts of small average productivity per farm and, except for the county in Arizona, contain many families that have strong religious beliefs. The smallest families are found in parts of New England and New York, central Indiana, northern Missouri, the Yazoo delta, in many livestock-ranching counties of the arid West, and in the Pacific Coast States.

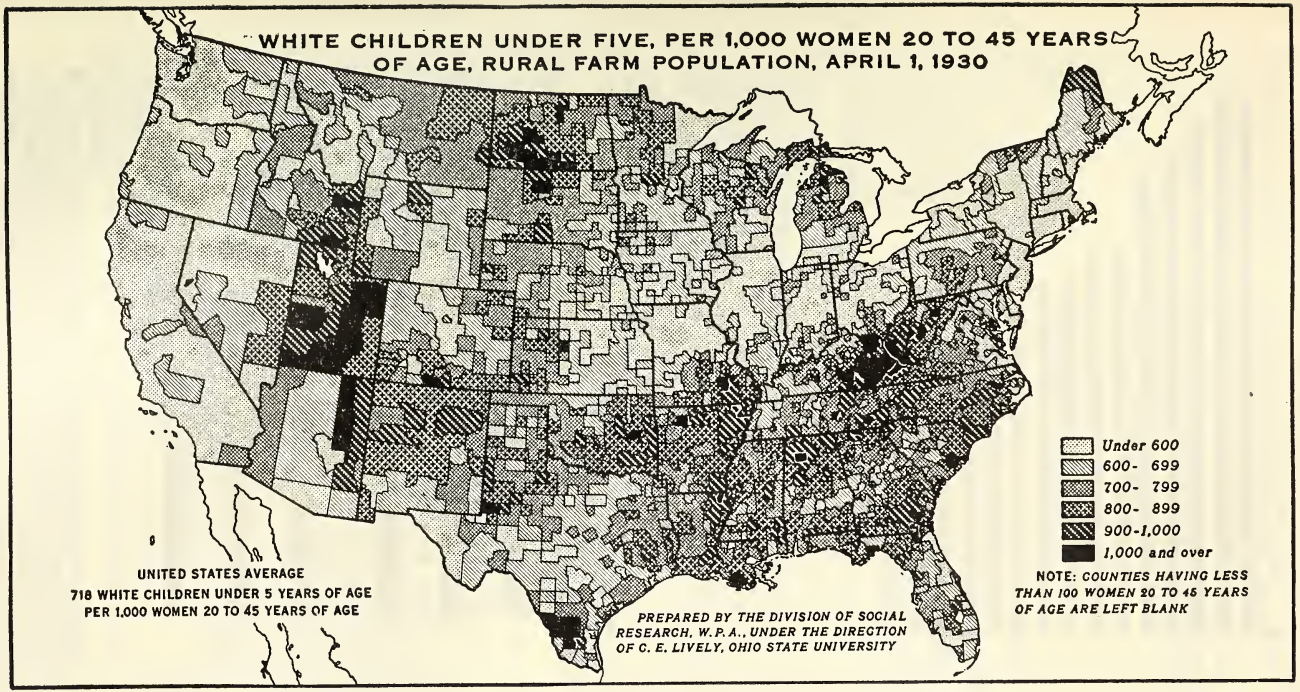


FIGURE 51.—The ratio of children under 5 years of age to women of childbearing age (assumed in this case to be 20 to 45 years) is a better measure of the fertility of a population than the average size of the family, or the crude birth rate (births per 1,000 population). About 440 children under 5 per 1,000 white women who are 20 to 45 are now necessary to hold population permanently stationary. In the Northeast and the Corn Belt the surplus of children in the farm population above this number was 20 to 50 percent in 1930, and in some suburban counties of the Pacific Coast States a deficit has developed. By contrast, the surplus exceeded 100 percent in many counties of the southern Appalachian and Ozark areas, and in a few counties elsewhere.

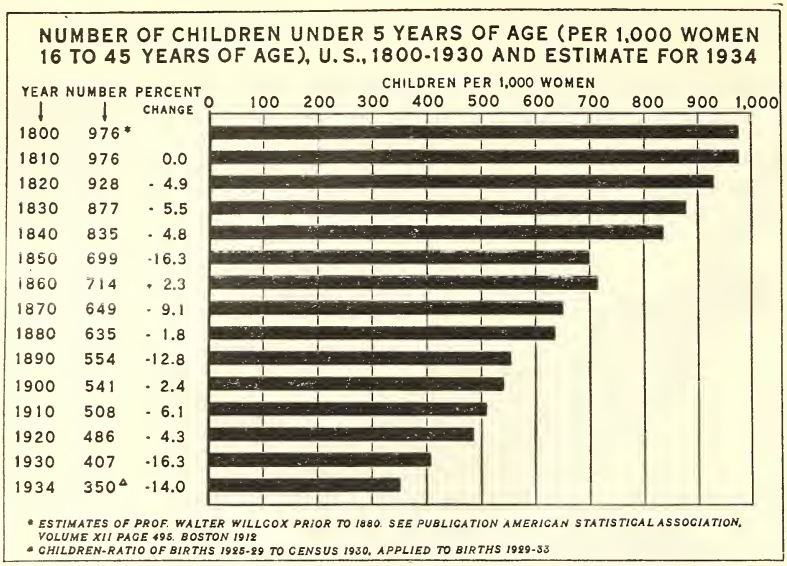


FIGURE 52.—The birth rate, as measured by the ratio of children under 5 to women of childbearing age, has been decreasing in the United States for more than a century. From 1920 to 1930 the decline was over twice as rapid as in most previous decades. The significant fact shown by the graph is that the declining birth rate is a long-time trend, and that the rate of decline has become more rapid in recent years.

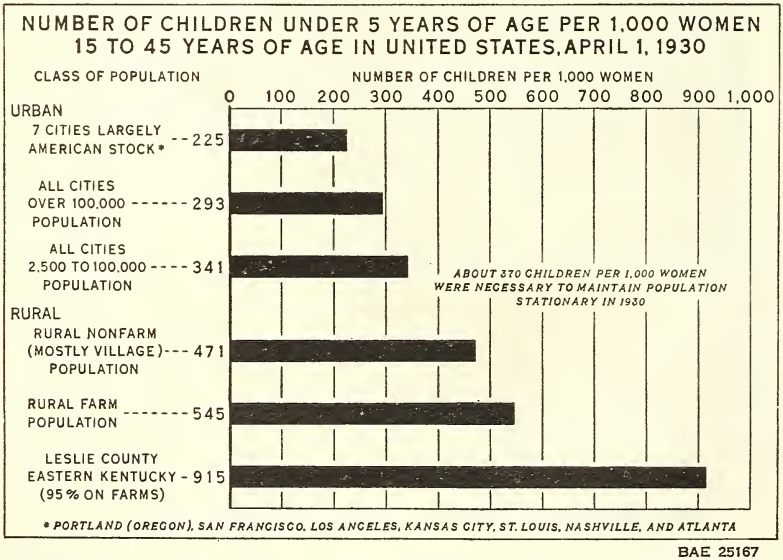


FIGURE 53.—In 1930 the seven cities largely of American stock lacked 40 percent of having enough children to maintain their population permanently stationary without accessions from outside, and all cities of over 100,000 population had a deficit of 20 percent, while the smaller cities had a deficit of 7 percent. On the other hand, the rural nonfarm (mostly village and suburban) population had a surplus of 27 percent, and the farm population of 50 percent. In 1930, urban deficit and rural surplus nearly balanced. Since 1930 births have declined 10 percent.

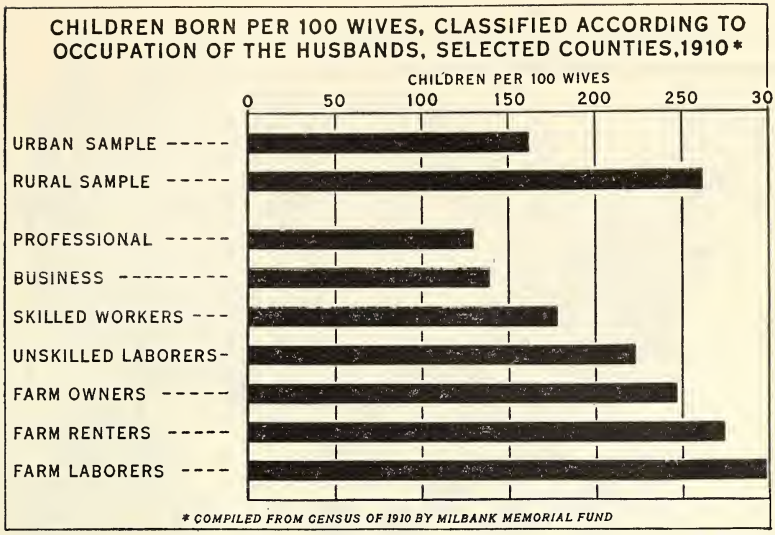


FIGURE 54.—In 1929 the Milbank Memorial Fund tabulated the returns from the 1910 census inquiry, "Mother of how many children: Number born ——", for 100,000 native white women classified by occupation of husband. The results were standardized for age of wife, duration of marriage, etc. Farm laborers averaged 9 percent more children born than tenants and these 12 percent more than owner operators. But farm owner operators averaged 11 percent more than unskilled laborers in the cities, while the unskilled averaged 25 percent more than the skilled, and these 27 percent more than businessmen.

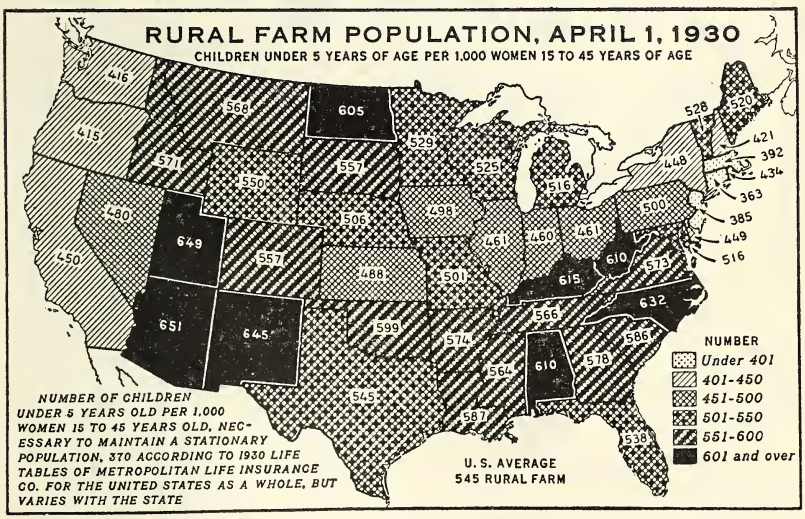
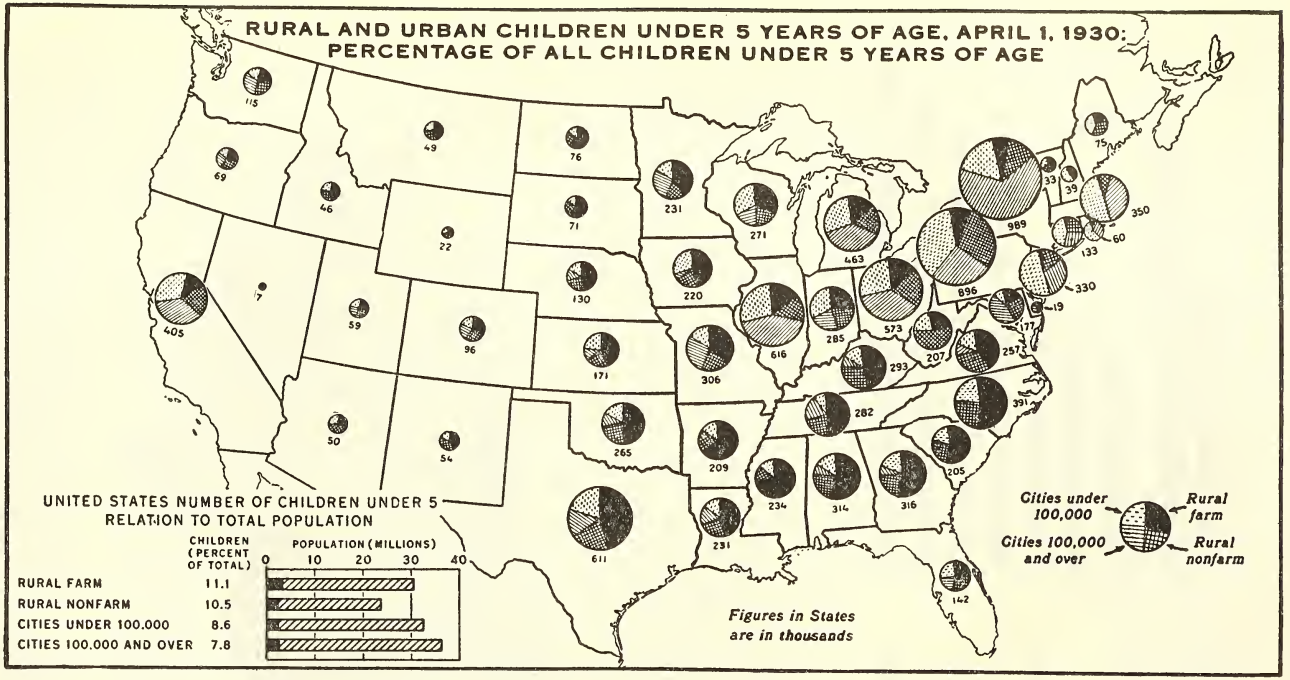


FIGURE 55.—In every State, with the possible exception of Connecticut, the rural farm population was more than reproducing itself in 1930. In the Southern and the Rocky Mountain States 10 adults were raising 15 to 18 children, but in the Corn Belt only 12 to 14, and on the Pacific coast only 11 or 12. Since 1930 the birth rate in the Nation as a whole has fallen fully 10 percent, and the decline may have been about as great in the rural farm population. The birth rate in the farm population may now average only 35 percent above the reproduction level.



BAE 25639

FIGURE 56.—The farm population constituting one-fourth of the total population of the Nation in 1930, included one-fifth of the women 20 to 40 years of age, but three-tenths of all children under 5. The rural nonfarm population included over one-fifth of all children under 5. The rural children under 5 constitute one-half to three-fourths or more of all children in the Southern and Western States, except California and Washington; the urban children one-half to nine-tenths or more in the States from Illinois east and northeast.

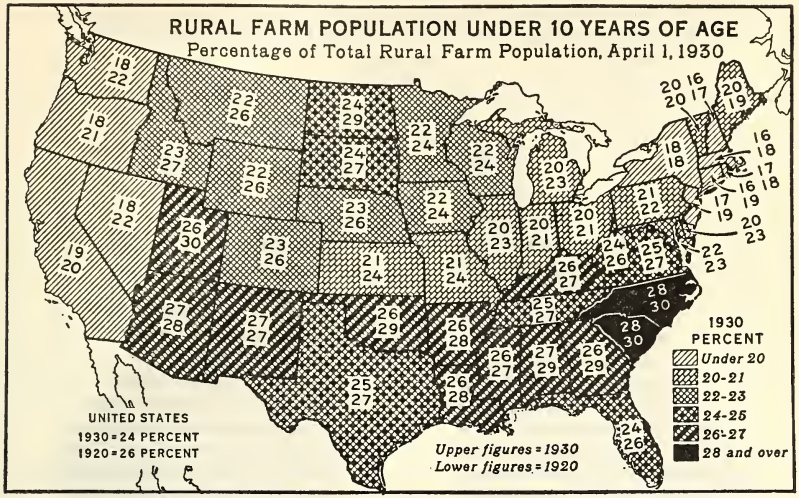


FIGURE 57.—The proportion of the farm population under 10 years of age ranges from 16 percent in New Hampshire, Massachusetts, and Connecticut, to 28 percent in the Carolinas. It appears that the farm people of the South and Southwest are contributing 25 to 50 percent more children proportionately to the Nation's need than are the farm people on the Pacific coast, the eastern Corn Belt, and the Northeastern States. This heavy burden of child rearing and education in the South is associated with a much lower taxable wealth per adult.

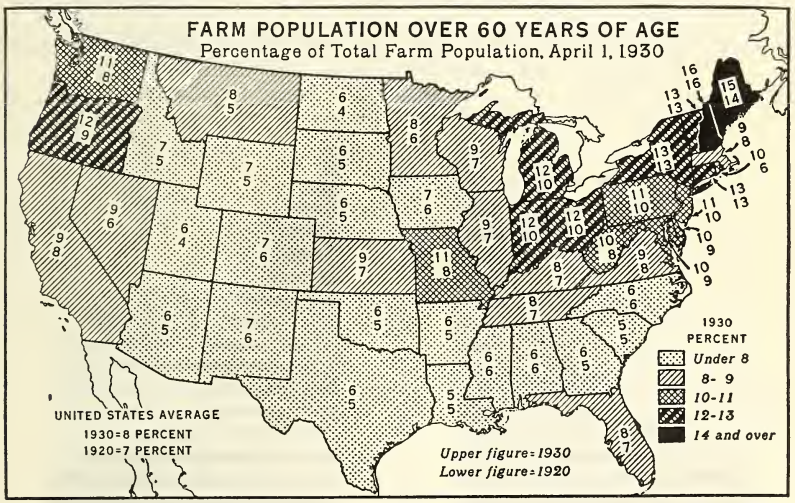


FIGURE 58.—The proportion of the farm population over 60 years of age was about twice as high in the States from Indiana and Michigan to Maine in 1930 as in the Cotton Belt and most of the Great Plains and Rocky Mountain States. The relatively few children and many old people on farms in the Northeastern States are prophetic of the conditions that are developing in the Nation as a whole. The increase in persons over 60 was 31 percent in the entire Nation between 1920 and 1930, and 46 percent in the urban population.

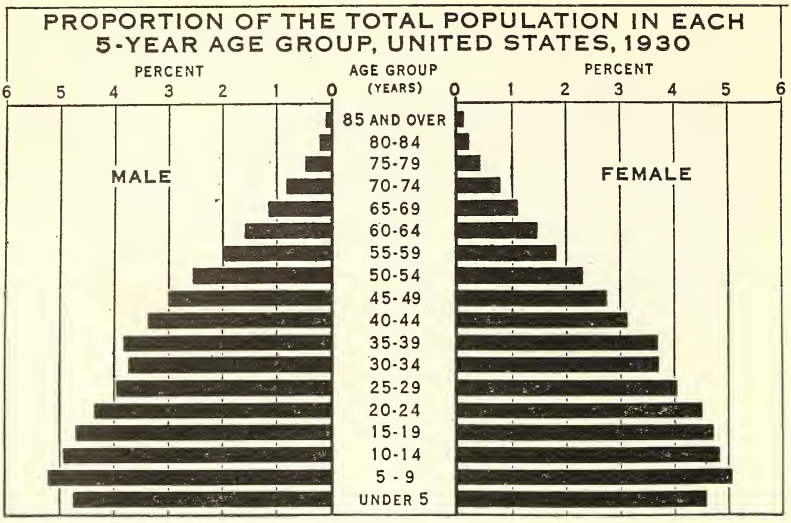


FIGURE 59.—In a permanently stationary population the number of children under 5 years of age would be larger than of 5 to 9 years of age, because of deaths among the children during the 5 years, unless there be differential migration of children from or to the region. In an increasing population the number of children under 5 relative to those 5 to 9 would be still larger. But in this graph children under 5 are less numerous than those 5 to 9 years of age. If such decline continues, it is clear that a declining population is inevitable unless there be immigration from outside.

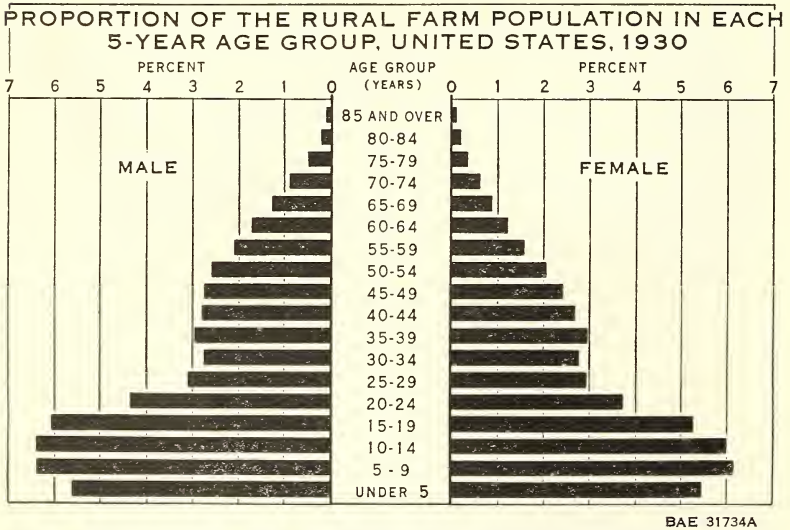


FIGURE 60.—In the rural farm population in 1930, as in the total population, there is the contraction in number of children under 5 years of age. Some of this reduction may be attributed to underenumeration. But the outstanding feature of the graph is the great reduction in the proportion of the population from 20 to 49 years of age. Only about half as many people were 30 to 34 as were 15 to 19 years of age. Nearly half the farm youth during the decade 1920–29 migrated to the cities and had not returned permanently

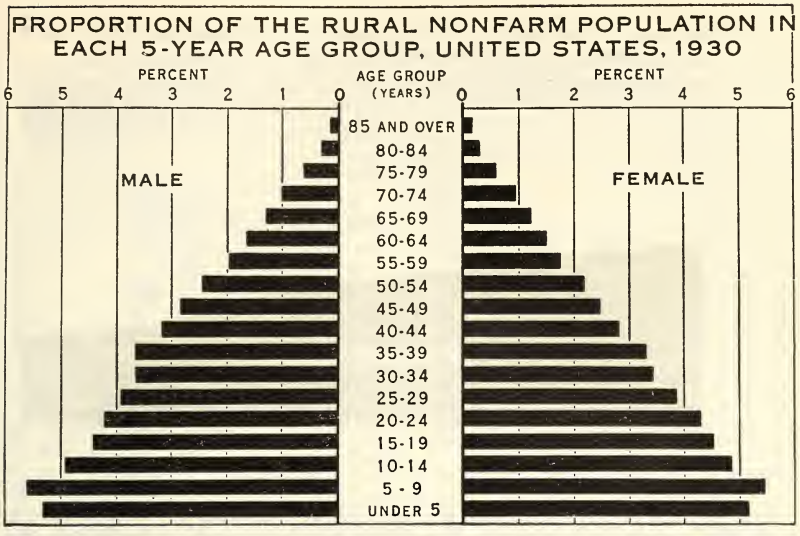


FIGURE 61.—The age distribution of the rural nonfarm population resembles that of the total population. Apparently the net migration of village and suburban youth and young middle-aged people to the cities is counterbalanced by migration of people of these ages from the farms. The proportion of the population which is over 70 is much larger in the rural nonfarm than in the rural farm or urban population. The contraction of the number of children under 5 is smaller than in the other population groups.

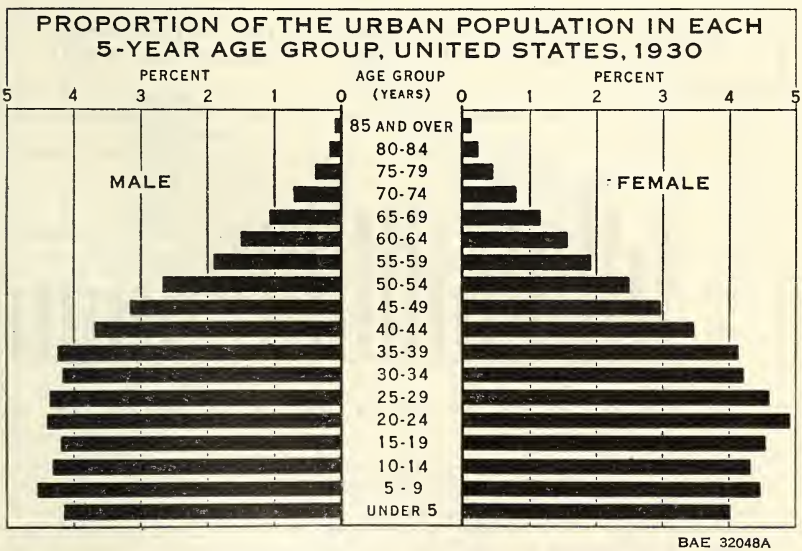


FIGURE 62.—The urban population in each 5-year age group from 5 to 39 years of age varies little, except that there is a considerably larger number of females 20 to 24 years of age than in any other 5-year age group. There are also more females than males 15 to 19 years of age—the rural girls start moving to the cities younger than the boys. Clearly the farms supply the cities with a large proportion of the people in the most productive years of life, and these have not yet lived long enough to be an old-age burden.

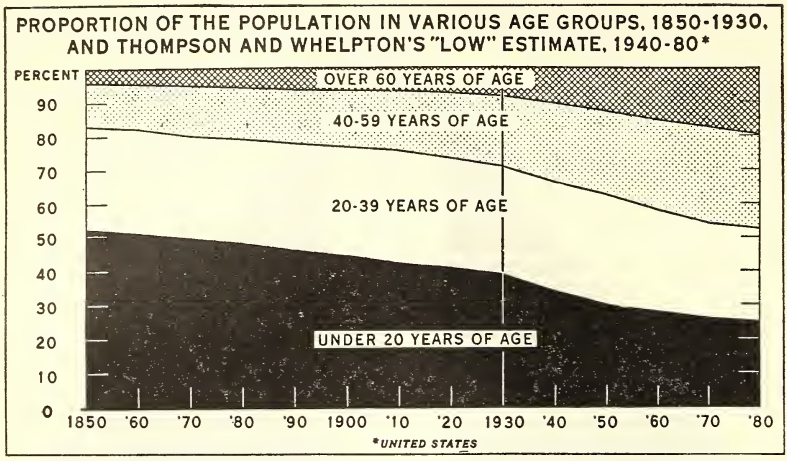


FIGURE 63.—In 1850 over half the population was under 20 years of age; in 1930 less than 40 percent. By 1950 it will be probably only 30 percent. In 1850 about 4 percent of the population was over 60 years of age. In 1930 the proportion had risen to 8.5 percent. By 1950 it will be probably 13 percent. In 1850 about 43 percent of the population was between 20 and 60 years of age. By 1930 people in these productive ages constituted 53 percent of the total population. By 1950 they will constitute about 57 percent, but soon after the proportion will decline.

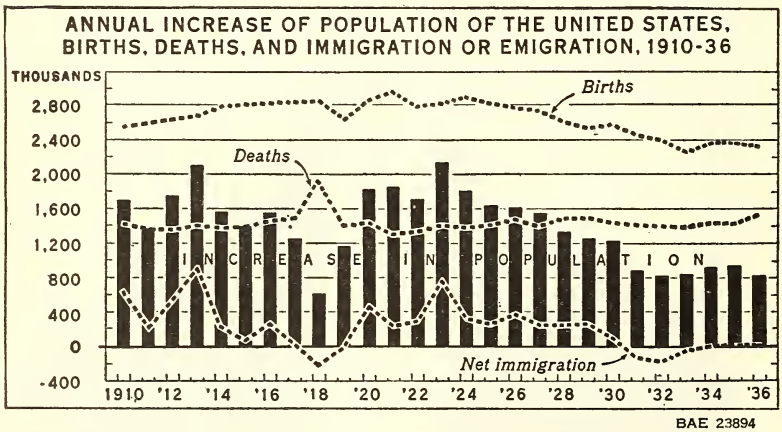


FIGURE 64.—Ten years ago the population of the United States was increasing about 1,600,000 a year. Now the increase is only 800,000. A stationary population is approaching rapidly, but it appears to be 15 years off, perhaps longer. The number of births has been trending downward since 1921. The number of deaths remains almost stationary, but must increase soon, because of the rapid increase in proportion of old people (fig. 63). Immigration is now an almost negligible factor in population increase, and restrictions on immigration seem likely to remain so long as unemployment persists. [Data from Thompson and Whelpton of Scripps Foundation for Research in Population Problems.]

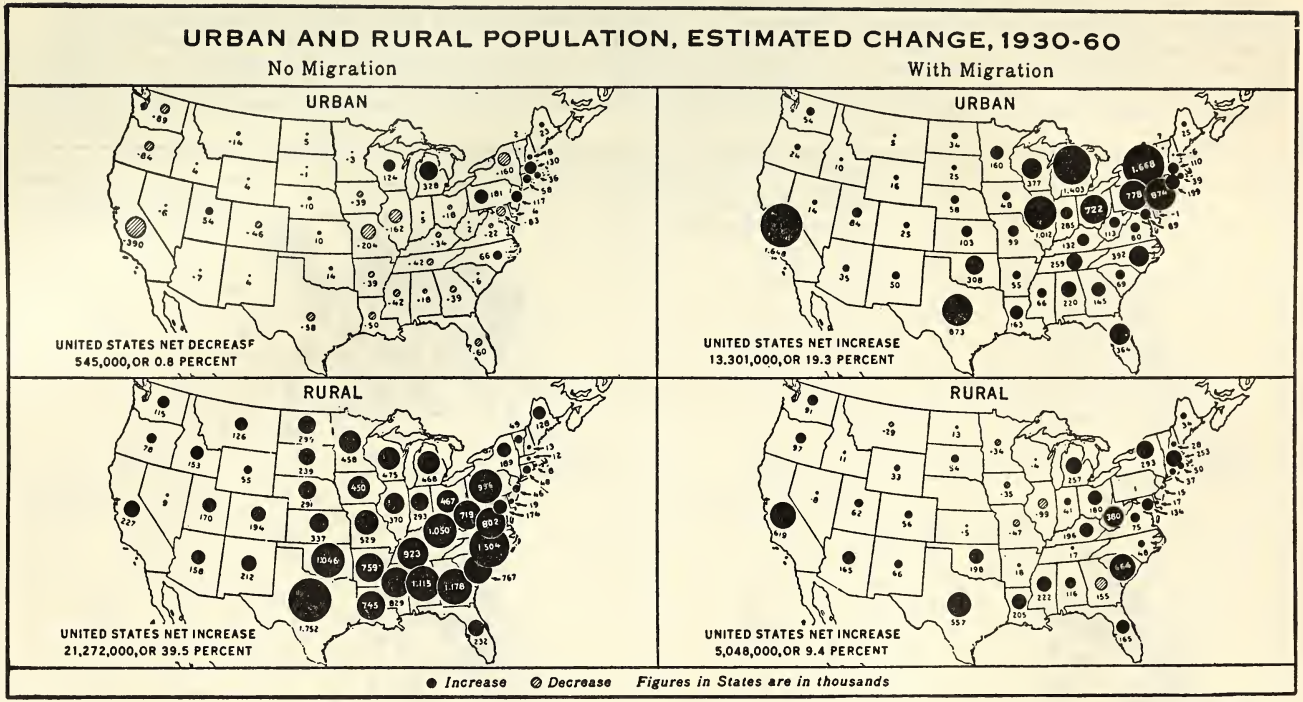


FIGURE 65.—If migration from the rural to the urban areas is not resumed, the urban population would be smaller in 1960 in most of the States, except the New England States, New Jersey, Pennsylvania, Michigan, Wisconsin, North Carolina, and Utah, while the rural population would increase in every State. In each of six Southern States the increase would exceed 1,000,000. But if migration from the farms and villages to the cities is resumed in predepression magnitude—and it is now approaching this magnitude—the urban population would increase in nearly every State, notably in the Northeast, while the rural population would decrease in the central West. Probably the changes that will take place will be somewhere between these extremes. [Estimates of Thompson and Whelpton.]

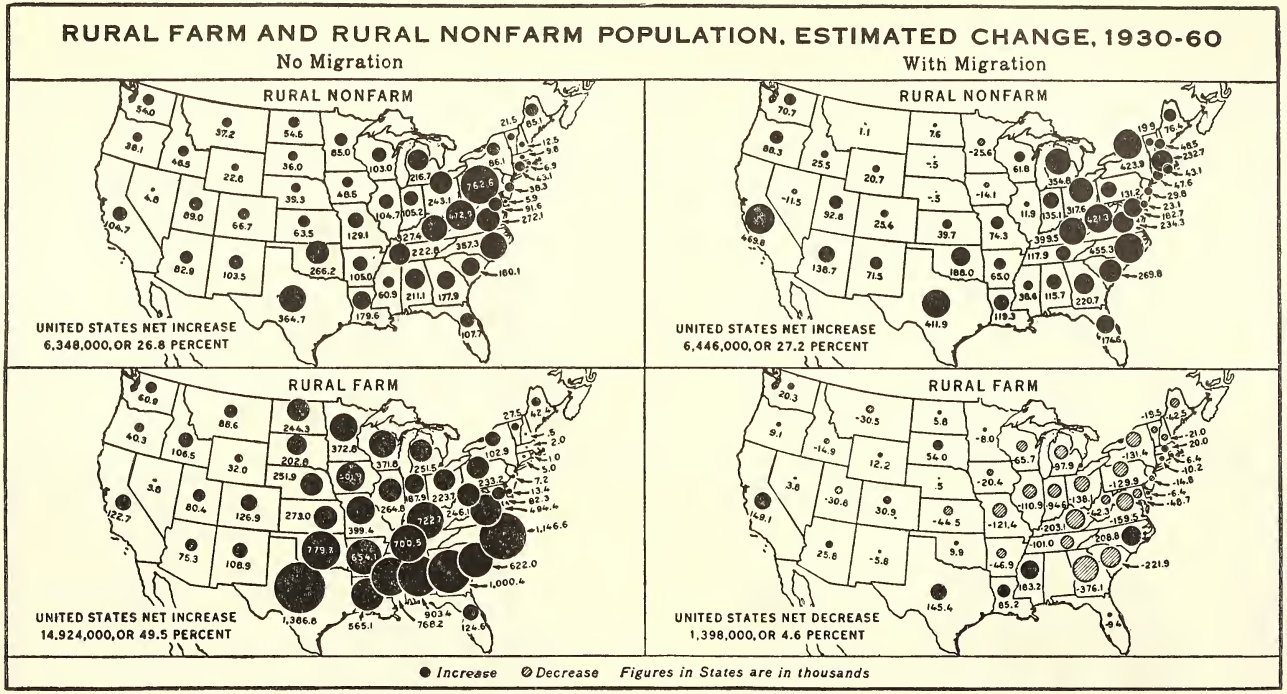


FIGURE 66.—If no net internal migration occurs, the rural nonfarm population will increase in every State, notably in Pennsylvania, the Virginias, Kentucky, and North Carolina; while the farm population will increase even more, notably in the South. Can southern farms support an increase in population of 60 percent? But if migration to the cities is resumed in predepression magnitude, a large decrease in farm population will occur in most States, even in most of the South; while the rural nonfarm population in the United States as a whole will increase in most States about as though no migration occurred. The extent to which one or the other of these extreme forecasts in farm population is approached may depend largely upon the frequency and severity of economic depressions. [Estimates from Thompson and Whelpton.]

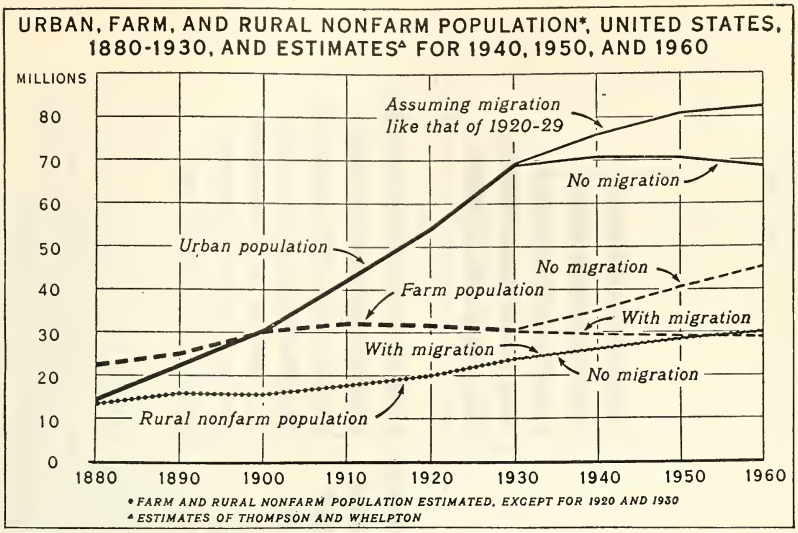


FIGURE 67.—During the half century, 1880–1930, urban population in the United States increased more than fourfold, rural nonfarm population (estimated prior to 1920) nearly doubled, and rural farm population increased scarcely a half. Practically all of this increase in farm population took place before 1910, little change in number occurring between 1910 and 1930. Looking to the future it is clear that the size of the urban and of the farm population will depend largely on internal migration.

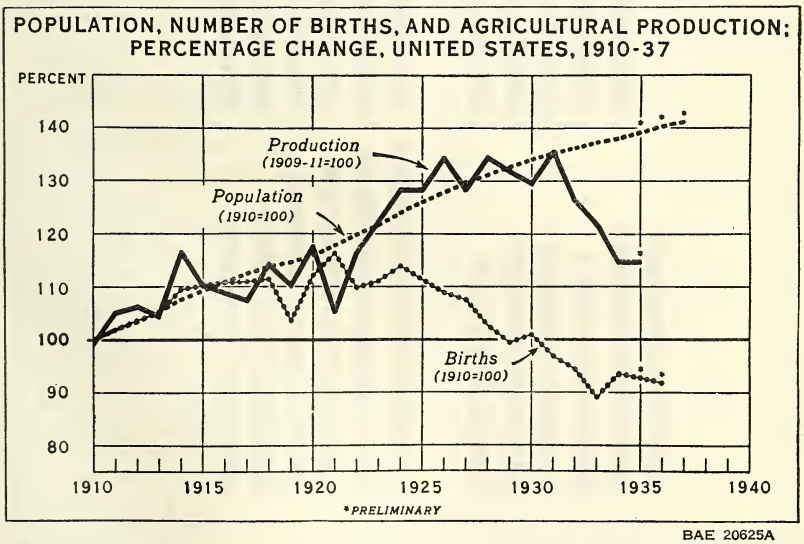


FIGURE 68.—The increase of population was remarkably steady until recently, only the influenza epidemic of 1918, which affected both births and deaths, causing a waver in the line. But in recent years the decline in births and the restrictions on immigration have caused a slowing down in the increase of population. Agricultural production, on the other hand, has fluctuated notably. Since 1931 the trend has been downward, largely because of extraordinary drought, the agricultural-adjustment program, and soil erosion. But far more notable than the recent decline in agricultural production has been the 22-percent decline in births since 1924

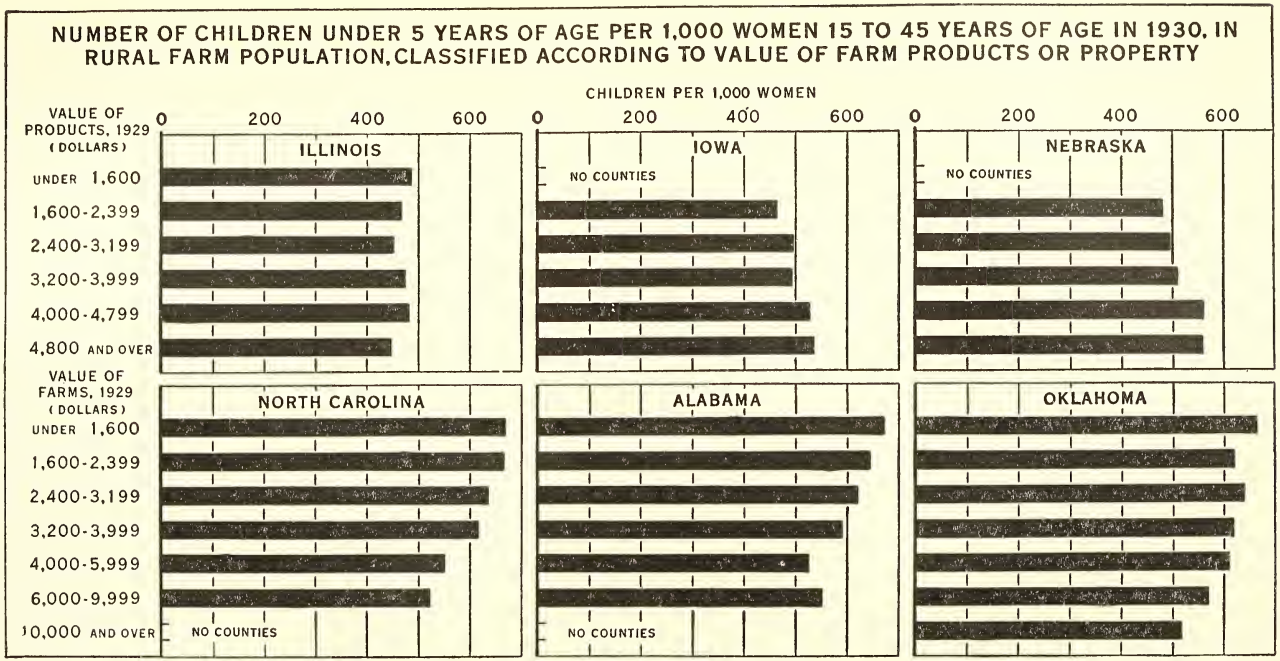


FIGURE 69.—In the three Southern States the birth rate, as measured by the number of children under 5 to women 15 to 45 years of age, apparently decreases with rise in economic status. But in at least two of the Corn Belt States there is an increase in the size of the family with increase in average value of products per farm. Like the established families of wealth in the cities, the families on the best farms of the Corn Belt, where educational facilities are generally excellent, seem likely to produce far more than their proportion of the Nation's leaders in the future. The classification was by county averages, not individual farm families.

INDEX